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UNDERSTANDING THE LEISURE EXPERIENCES OF COLLEGE-ATTENDING EMERGING ADULTS USING NEO-ERIKSONIAN IDENTITY THEORY

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ABSTRACT

Two fundamental characteristics of emerging adulthood, the developmental period coinciding with 18-25 years of age, are identity development and freedom. An individual's identity development, or identity status, is understood as the juxtaposition of identity exploration and identity commitment and can act as the basis by which to compare motivations and behaviors (e.g., well-being, healthy use of time) across emerging adults. The present research sought to understand a basic tenet of freedom, perception of leisure-free time, among American college-attending emerging adults (n=565) with distinctive identity statuses. The perception of free time may be understood as a function of identity development among emerging adults, and may help explain measures of well-being during this developmental period. Using quantitative analyses (e.g., hierarchical cluster analyses, mediation analyses, multiple analyses of variance), the findings of the research support the hypothesis that identity, well-being, and perception of free time are intertwined during emerging adulthood. Those working with emerging adults in college health and recreation settings should consider the impact of identity development and the perception of free time when creating and implementing programming and marketing campaigns. Further research is needed to understand the interrelationships between identity, well-being, and use of leisure-free time during emerging adulthood.

DEDICATION

This dissertation work is dedicated to emerging adults who thoughtfully reflect on the fun and not-so-fun moments of the period to figure out who they are. My hope for these individuals is that they will find that their emerging adulthood years, whether described as the highest of the highs, the lowest of the lows, or the same old routine, were instrumental in creating who they are today and have led them to a life filled with meaning and happiness.

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First, I would like to thank my chairperson, Denise Anderson, for her constant support and encouragement throughout this process. Denise, you exemplify qualities I hope to emulate in my professional career and personal life. You strive for excellence, approach your work with integrity, speak honestly, and exude confidence. You always looked out for my best interests and haven given of yourself selflessly to my graduate work. I hope I can one day do for others as you have done for me.

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process. I should have known better. Thank you for your contribution to my dissertation work, your infectious positivity, and the big-hearted welcome to your UNH family.

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CHAPTER ONE

Introduction

Background

Individuals experiencing the transition from adolescence into adulthood may encounter multiple developmental pathways, or life courses, due to the timing, sequence, and nature of experiences related to education, employment, and relationships. Emerging adulthood, or the developmental life phase that typically encompasses individuals between the ages of 18 and 25, was identified as a unique phase in the lifespan and is now used as a framework by which to further investigate the similarities, uniquenesses, and complexities of individual development occurring between the end of adolescence and the beginning of adulthood (Arnett, 2000). Due to cultural and societal norms inherent in western society (e.g., increasing levels of higher education, delaying marriage), emerging adulthood is marked by a high degree of freedom, flexibility, and opportunity; however, the countless opportunities, the lack of structure, and/or poor person-environment fit may adversely affect psychosocial functioning among individuals (Arnett, 2000; Burwell & Shirk, 2007; Schulenberg, Sameroff & Cicchetti, 2004). Thus, emerging adulthood is also a critical time for the identification and management of physical and mental health issues, stress-coping strategies and support systems that will ultimately affect health and well-being well beyond the emerging adulthood years (Kessler, Berglund, Demler, Jin, Merikangas, & Walters, 2005; Nelson, Story, Larson, Nuemark-Sztainer, Lytle, 2008).

Psychosocial functioning, or levels of psychological and social well-being and ill-being among emerging adults, is directly tied to identity development and consolidation (e.g., Schwartz et al, 2011). Identity development, the process by which one develops a sense of self, is measured by the processes (e.g., adaptive and maladaptive forms of exploration) and outcomes (e.g., satisfaction) of one's exploration and commitment to identity choices (e.g., career choice, religion, morals) (Marcia, 1966; 1980; Meeus, Iedema, & Maassen, 2002). The level of identity exploration and commitment as reported by the individual can be used to cluster the individual into an identity status with other individuals who are at the same point in identity development (Marcia, 1966; 1980). In general, identity commitment plays an important role in personal functioning and well-being in that it provides individuals with a sense of purpose and direction, and can be used as a frame of reference by which behavior can be regulated (Berzonsky, 2003). Adaptive exploration of identity choices, or exploring one's identity options in breadth and depth, is also tied to high levels of well-being; however, the uncertainty and myriad of identity choices that are directly tied to identity exploration can also lead to ill-being, including anxiety and depression. Moreover, those emerging adults who engage in maladaptive identity development through brooding, rumination, and avoidance are likely to experience low levels of well-being and high levels of ill-being (Schwartz et al, 2011).

Researchers have explored the relationship between individual identity development and external factors such as family, gender, and ethnicity, as well as others (e.g., Schwartz & Montgomery, 2002; Schwartz, Pantin, Sullivan, & Szapocznik, 2005). Another external factor by which identity may be manifested and/or affected is that of

leisure. Leisure may prove to be a developmental context in which an individual prospers through challenging and/or personally expressive leisure opportunities, copes with stressors related to development, or struggles with the developmental transition of emerging adulthood by experiencing anxiety, boredom, or unhealthy leisure (Kleiber, 1999). Schwartz et al. (2011) suggested that helping emerging adults find personally meaningful and expressive activities may boost well-being, which further acts as a protective factor against health-compromising behaviors. Alternatively, identifying harmful or destructive behaviors that are central to some emerging adults' identities may shed light on the qualities of those experiences that attract these individuals to those harmful behaviors (Ritchie et al, 2013), and then those qualities can be identified or infused in healthy activities. Moreover, an understanding of identity within interpersonal and social contexts is crucial as the knowledge of how context influences development is key to designing effective intervention programs that guide individuals in healthy identity development (Markstrom-Adams & Spencer, 1994). The changing leisure contexts and social roles experienced during emerging adulthood may result in the creation of increased or decreased matches between individual needs (e.g., self-esteem, identity expression, identity affirmation) and contextual affordances (e.g., leisure companions, resources) (Schulenberg et al., 2004). Consequently, the role that leisure plays in facilitating well-being may be differentially dependent on the interplay of the individual's identity and the context in which the individual lives and plays.

One frequently studied aspect of leisure is that of free time. College students, who traditionally fall within the emerging adulthood time period, spend approximately 40

hours per week engaged in leisure free-time (Brint & Cantwell, 2008). Those emerging adults who spend their free time being active, socializing, and/or volunteering are more likely to be academically engaged and possess high levels of well-being, whereas those who participate in solitary or sedentary activities (e.g., watching television) demonstrate low levels of academic engagement and well-being (Brint & Cantwell, 2008; Doerksen, Elavsky, Rebar, & Conroy, 2014). As college students report that they socialize less, use social media more, and feel low levels of emotional well-being (Eagan, Stolzenberg, Ramirez, Aragon, Suchard, & Hurtado, 2014), there is a pressing need to further understand the nuances of free time among this age group. Moving beyond *how* emerging adults engage in leisure time and delving into *why* emerging adults use their free time in certain ways may provide further depth in our understanding of the leisure experience while creating tangible recommendations that will bolster healthy use of free time among college students.

Understanding the navigation of free time as a function of identity development is not only needed by developmental psychologists and counselors but is also important to our understanding of the leisure experience. Research regarding leisure's role in major life events and well-being has mostly focused on middle aged and older adults involved in the major transitory life events of illness, marriage, divorce, widowed, retirement, unemployment and employment (Iwasaki & Smale, 1998). While other scholars have looked at leisure changes from a quantitative, longitudinal perspective from adolescence into adulthood, these scholars defined the starting point of young adulthood to begin at high school graduation (e.g., Raymore, Barber, Eccles & Godbey, 1999). Because

emerging adulthood occurs roughly between the ages of 18-25, the understanding of how an individual's leisure changes from adolescence through emerging adulthood into young adulthood has been largely neglected (Raymore, Barber, Eccles, & Godbey, 1995; Shinew & Parry, 2004). Consequently, additional quantitative and qualitative research is needed to understand the leisure involvement and experiences of emerging adults as they transition from adolescents to adults. Additionally, many researchers have sought to explain an individual's approach to leisure time through the lens of social identity (e.g., ethnicity, gender, sexuality) (e.g., Barnett, 2005; Barnett & Klitzing, 2006; Caldwell, Kivel, Smith, & Hayes, 1998; Wegner & Flisher, 2009). This research seeks to understand how internal attributes, such as one's psychosocial identity development, influences an individual's perception of leisure free-time. The approach to understanding the leisure experiences as a function of internal attributes follows recent studies on personality (Barnett, 2011; 2013), internal leisure beliefs (Watkins, 2013), and well-being (Blanco & Barnett, 2014).

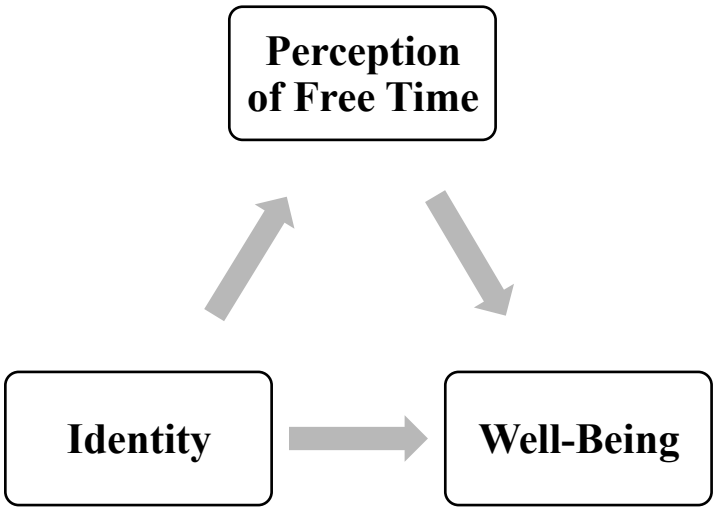
This research aims to understand the perception of free time among emerging adults with differing psychosocial identity statuses and address how one's perception of free time, identity development, and psychosocial functioning are interrelated. Those working directly with emerging adults on college campuses in health, wellness, counseling and recreational settings may benefit from understanding how emerging adults' overall identity statuses are manifested through the perception of free time and subsequent experiences of positive and negative functioning. Equally as important, this research may help us understand the ways in which professionals working with emerging

adults may foster identity development through free time. A quantitative approach will be employed to understand the relationships among free time, identity development, and well-being.

Conceptual Model

The conceptual model of this research study served as a framework by which the relevant bodies of research was presented and the quantitative data analysis was be performed (Figure 1.1). The three relevant bodies of research are identity, leisure experiences and involvement, and psychosocial functioning among emerging adults. The direction of the arrows in the figure alludes to the proposed mediation analysis inherent in research question 2, although they do not indicate causality.

Figure 1.1: Conceptual Model of Research Study



Theoretical Framework

This research was guided by several frameworks and theories that explain how an emerging adult with a particular identity may experience leisure within the societal

context. The identity literature largely stems from Erikson's psychosocial identity theory, which regards identity development as a major developmental task occurring during adolescence and beyond (Erikson 1968, 1980). This approach acknowledges that a person must balance one's values, goals and ambitions with the external forces of family, peers and society in hopes of creating a consistent identity across one's ego (internal) identity, personal identity, and social identity. Following Erikson's work, Marcia operationalized Erikson's concept of identity synthesis versus confusion using the Identity Status paradigm (1980) and other neo-Eriksonian scholars have continued investigating the nuances of identity development; see Schwartz (2001) for an overview of neo-Eriksonian work. This research will continue with the neo-Eriksonian approach, but other approaches to understanding identity (e.g., self-construction, self-discovery) will be presented throughout the articles for informational purposes as needed. The theoretical approach to the leisure literature includes the exploration of emerging adult's perception of free time and will be based on the psychological, qualitative nature of leisure experiences as framed by flow theory (Csikszentmihalyi, 1990) and optimal arousal theory (Iso-Ahola, 1980).

List of Key Definitions/Terms

- *Emerging adulthood*: Positioned between adolescence and young adulthood, emerging adulthood is a distinct developmental period occurring between the ages of 18-25. The developmental period is marked by relatively high amounts of freedom from social roles (e.g., full-time employee, spouse, parent) and freedom from normative expectations (Arnett, 2004).

- *Identity*: Following Erikson's developmental-social approach, identity can be understood as one's most internal and unconscious aspects of self (ego identity), one's goals, values and beliefs (personal identity), and the embeddedness of ego identity and personal identity within social and cultural contexts (social identity) (Schwartz, 2001).
- *Identity status*: Following Erikson's work, identity statuses are an ego-analytical approach to classifying an individual's identity based on self-reported levels of identity commitment and identity exploration (Marcia, 1966).
- *Psychosocial functioning*: Positive and negative forms of psychological and social well-being and ill-being among emerging adults (e.g., self-esteem, depression).
- *Perception of free time*: The qualitative aspects of leisure that represent a person's experiences of free time; the leisure experience dimensions include leisure awareness, leisure boredom, leisure challenge, and leisure distress (Barnett, 2005; Caldwell, Smith, & Weissinger, 1992).

Research Questions

- RQ 1: Do emerging adults of differing identity statuses perceive leisure free time differently?
- RQ 2: Do groups with unique perceptions of free time differ on measures of well-being and identity dimensions?
- RQ 3: Does perception of leisure free time play a mediating role between measures of psychosocial functioning among emerging adults?

Dissertation Format

This dissertation is structured in the "article format" in that the three chapters described below are written for specific peer-reviewed academic journals. The specified journal was selected for the respective article based on the journal's purpose and audience.

1. Article 1 seeks to understand how emerging adults with distinctive identity statuses perceive their free time (Research Question 1). The article clusters emerging adults based on their levels of identity exploration and commitment, and then uses those clusters to ascertain how leisure free time is perceived among the distinct groups. This article is intended for *Identity: An International Journal of Theory and Research.*
2. Article 2 takes a social marketing approach and divides emerging adults into groups based on perceptions of free time to understand how unique groups, or markets, within emerging adulthood may differ on regular activity participation and dimensions of well-being (i.e., self-esteem and depression). The journal article answers Research Question 2 and provides implications for health-related marketing and programming on college campuses. As such, the article was written with the *Journal of American College Health* in mind.
3. Article 3 takes a comprehensive approach to understanding the intersectionality of identity, well-being and free time by exploring the extent to which perception of free time mediates the relationship between self-esteem and depression, and understanding the mediation process from the perspective

of distinct identity groups (Research Question 3). The article is intended for *Leisure Sciences: An Interdisciplinary Journal.*

The final chapter acts as the concluding chapter, which will briefly summarize the findings and implications from the three chapters and provide direction for future research.

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CHAPTER 2

Awareness, Boredom, and Challenge: The Perception of Free Time among College-Attending Emerging Adults with Distinctive Identity Statuses

Identity Development during Emerging Adulthood

Emerging adulthood is the developmental period associated with individuals between the ages of 18-25 who are transitioning from adolescence to adulthood (Arnett, 2000). As emerging adults move away from oversight by parents and school officials and commonly into the less-structured settings of higher education, their individual characteristics, skills sets, and resources may differentially affect how they navigate the freedom inherent in emerging adulthood and adulthood (Arnett, 2004). Free time is particularly important during emerging adulthood because it not only represents an escape from supervision, responsibility, and structure, but can also represent the autonomy to explore and commit to one's identity through challenging activities during free time. For others, free time may be a time of rumination, foundering, and risky health behaviors. Thus, as emerging adults move toward adulthood, their approach to free time and their ability to achieve work-life balance will be important for their lifespan trajectories, including work productivity, family functioning, etc. Recent research on identity formation during emerging adulthood has provided insight on why some emerging adults are better prepared to navigate the freedom of emerging adulthood (e.g., Luyckx et al., 2008).

Identity formation is a major developmental task occurring from adolescence into emerging adulthood (Arnett, 2004). One's identity explains the reconciliation of internal

values, goals, and desires with external forces such as peers, parents, and society at large (McAdams & Cox, 2010). Marcia (1966; 1980) proposed that identity work is broken into two phases: identity exploration and identity commitment. Identity exploration is the consideration of who one wants to be through the examination of identity alternatives before an identity commitment is made (Berman, Schwartz, Kurtines, & Berman, 2001). Identity commitment is choosing who one wants to be as well as the satisfaction with the chosen identity commitment (e.g., Bosma, 1985; Marcia 1966; 1980; Meeus, 1996; Meeus, Iedema, & Maassen, 2002). An individual determines the level of satisfaction with existing identity commitments through in-depth explorations of those commitments (Luyckx, Goosens, Soenens, & Beyers, 2006).

Recently researchers have sought to incorporate the dimensions of exploration and commitment into one comprehensive model in order to understand the mechanisms underlying identity exploration and commitment (Luyckx et al., 2006; Luyckx, Schwartz, Goossens, Soenens, & Beyers, 2008). The Dimensions of Identity Development Scale (DIDS) measures a model consisting of five identity dimensions, which include two commitment dimensions and three exploration dimensions. Commitment is measured by two different dimensions. *Identification with commitment* is a measure of one's certainty, happiness, and internalization of identity choices (Luyckx et al., 2006, Luyckx et al., 2008). The identification with commitment identity dimension operationalizes the ideas of Meeus regarding the evaluation of commitments already made (Meeus et al., 2002). *Commitment making* refers to the degree to which an individual has made choices concerning his or her identity (Luyckx et al., 2008). This dimension aligns with Marcia's

conceptualization of commitment in that the emphasis lies on making a choice rather than the happiness or certainty regarding the nature of the choice.

Exploration is broken down into three dimensions. *Exploration in breadth* describes when an individual is actively investigating different identity alternatives and information before identity commitments are made (Luyckx et al., 2006). *Exploration in depth* involves examining existing commitments in order to ascertain the degree to which they align with personal goals, values and beliefs. While these dimensions of exploration originate from two different identity measures—exploration in breadth with Marcia's paradigm and exploration in depth with Meeus' process model, both are considered to be adaptive forms of identity exploration as they demonstrate openness and curiosity (Luyckx et al., 2006). However, researchers noted that exploration can also be maladaptive in that an individual may dwell on identity issues without taking action, thereby resulting in brooding and anxiety (Burwell & Shirk, 2007; Trapnell & Campbell, 1999). Consequently, an additional identity dimension, *ruminative exploration*, was the most recent addition to the model (Luyckx et al., 2008). Ruminative exploration involves an unproductive pattern of exploration that is filled with repetitive self-doubt and the search for the unattainable goal of the perfect choice (Luckyx et al., 2008; Ritchie et al., 2013; Trapnell & Campbell, 1999).

The dimensional approach to understanding identity formation and commitment allows researchers to understand how those dimensions work together to form identity statuses (e.g., Luyckx, Schwartz, Goossens, Soenens, & Beyers, 2008a). In other words, based on the findings from Luyckx and colleagues (2005; 2008b) and Schwartz et al.

(2011), individuals can be clustered into identity statuses (e.g., *achievement*, *foreclosure*) based on their reported levels of individual identity dimensions (e.g., identification with commitment, exploration in depth). The identity dimensions were found to cluster into five defined identity statuses and one undifferentiated cluster in previous work (Luyckx, et al., 2008; Schwartz, et al., 2011).

Using the results from Luyckx et al. (2008), the identity statuses were found to be related to the identity dimensions in the following manners. Individuals clustered into the *achievement* identity status score high on both commitment dimensions, moderately high to high on exploration in breadth and depth, and low on ruminative exploration. Those clustered in *foreclosure* status score moderately high to high on both commitment dimensions, moderately low to very low on exploration in breadth and ruminative exploration, and moderately low to intermediate on exploration in depth. Individuals clustered into *ruminative moratorium* and/or *searching moratorium* score moderately low to intermediate levels on both commitment dimensions and high to very high on all three exploration dimensions. Those grouped into *carefree diffusion* score moderately low to low on both commitment dimensions, low to very low on exploration in breadth and exploration in depth, and intermediate on the ruminative exploration dimension. Individuals in the *diffused diffusion* identity status score very low on both commitment dimensions, intermediate on exploration in depth and exploration in breadth, and high to very high on ruminative exploration. Finally, those grouped individuals who report intermediate scores on all dimensions are categorized into an *undifferentiated* status.

These findings have been replicated with minimal deviations in other studies (e.g., Schwartz et al., 2011).

Navigating the Freedom of Emerging Adulthood

Freedom is an inherent portion of emerging adulthood (Arnett, 2004), and how one perceives free time may reflect one's current identity statuses. Developmental psychologists and leisure researchers have sought to understand the phenomenon of free time among youth, adolescents and emerging adults and its differential impacts on health and well-being (e.g., Caldwell, Smith & Weissinger, 1992). Four typical qualitative characteristics used to explore perceptions of freedom are awareness, boredom, challenge and distress (Barnett, 2005; Caldwell, Smith & Weissinger, 1992).

Awareness

Awareness includes the knowledge of resources, opportunities, and events that would better equip emerging adults to utilize their free time for healthy identity development. Previous research on emerging adults' knowledge-seeking behavior has provided insight of differing processes among the aforementioned identity statuses. The *achievement* and *moratorium* statuses are correlated with information-seeking behavior in that these individuals are open to new information, seek out additional relevant information, and make decisions once they have considered the information (Berzonsky, 1989; 1990; Berzonsky & Cieciuch, 2014). Moreover, those with optimal identity development (e.g., those in the *achievement* status) also have higher levels of identity capital, or agency used to accrue and navigate identity-related resources, such as tangible (e.g., knowledge and involvement in community organizations) and intangible resources

(e.g., self-esteem, locus of control) that help them navigate identity development and its related environments (Côté, 1997, 2000; Côté & Levine, 2002; Côté & Schwartz, 2002). Those in the *foreclosed* status are also likely to be aware of resources and opportunities; however, individuals in this status use a normative approach to information in that they gather information from and make choices that conform to normative standards set by parents, peers, or other authority figures (Berzonsky, 1989). These individuals utilize information and make decisions to protect existing beliefs and identities, and they have a low tolerance for change and ambiguity (Berzonsky, 2004). Finally, those who lack firm commitments, as represented by the *diffusion* statuses (i.e., *diffused diffusion, carefree diffusion*) typically avoid dealing with challenges, problems or decisions, and procrastinate until extrinsically motivated to take a course of action (Berzonsky, 1989, 1990; Berzonsky & Adams, 1999; Berzonsky & Kuk, 2000; Berzonksy, Soenens, Luyckx, Smits, Papini, & Goossens, 2013; Schwartz, Mullis, Waterman, & Dunham, 2000).

Boredom

Boredom lies at the opposite end of the continuum from intrinsic enjoyment/absorbing interests. Boredom may lead individuals to use free time for activities that have been associated with negative consequences, such as video game and internet use, marijuana use, etc. (e.g., Lee, Neighbors, & Woods, 2007; Padilla-Walker, Nelson, Carroll, & Jensen, 2010). Iso-Ahola and Weissinger (1987) found there are six factors associated with lower perceptions of boredom, including a larger leisure

repertoire, lower perception of constraints on leisure, greater awareness of the value of leisure, higher leisure ethic, lower work ethic, and higher self-motivation.

Challenge

Free time may be used to challenge one's ability, try the unknown, or participate despite the possibility of failing. An acceptable level of challenge is a necessary component of flow (i.e., the complete absorption in an activity) (Csikszentmihalyi, 1990), and a major component of the self-discovery identity model (Schwartz, 2001; Schwartz, Kurtines, & Montgomery, 2005; Waterman, 1990). Through the self-discovery process, some emerging adults may choose to experience challenge during their free time by "pursuing opportunities that lead to self-improvement in a variety of intellectual, occupational, and psychosocial areas" (i.e., developmental individualization) while others may spend their free time "focusing on the latest youth culture fashions and trends to impress peers, while ignoring self-improvement" (i.e., default individualization) (Côté & Schwartz, 2002, p. 574). Those in the *achievement* identity status have been associated with developmental individualization, or the tendency to pursue challenging self-improvement activities, whereas those in the *diffusion* statuses have been strongly tied to the default individualization process, or the avoidance of challenging self-improvement activities (Côté & Schwartz, 2002; Schwartz, Côté, & Arnett, 2005). Thus, we predict that those in the *achievement* status are more likely to pursue challenging activities during free time whereas the diffusion statuses will avoid activities that are challenging.

Distress/anxiety

The fourth and final qualitative aspect that may be experienced during free time is anxiety, or the negative feelings one might experience when encountering free time (Barnett, 2005). Both Caldwell et al. (1992) and Barnett (2005) gave minimal literature support that links anxiety to how one approaches their free time. However, Barnett (2005) did note that despite the paucity of research on leisure anxiety, there has been a wealth of research on the multidimensional nature of anxiety (e.g., general anxiety, social anxiety). Schwartz et al (2011) found that in general, those in the *diffusion* statuses have higher presence of general anxiety and social anxiety where those in *achievement* and *foreclosure* statuses have lower levels of negative functioning. This research will serve to extend our understanding of leisure anxiety as another dimension of the psychological construct of anxiety.

The Present Study

Because freedom and identity development are inherent characteristics of emerging adulthood, this research sought to understand how one's identity development relates to perceptions of free time among college-attending emerging adults. The present study sought to answer the following research question:

- Do emerging adults of distinctive identity statuses possess different levels of the perceptions of free time?

In order to answer this question, Luyckx et al.'s approach to identity formation using the Dimensions of Identity Development Scale (DIDS; 2008) was used to create identity statuses among the participants. Next, the identity statuses were compared to determine if

there were differences in perceptions of free time among the domains of awareness, boredom, challenge and distress. The hypotheses are as follow:

1) Individuals in *achievement* and *foreclosure* statuses will have higher levels of awareness of things to do within their community during free time as compared to those in the *diffusion* statuses.
2) Those in the *achievement* and *foreclosure* statuses will express a willingness to pursue challenging activities during free time whereas the *diffusion* statuses will have a lower desire for challenge (Côté & Schwartz, 2002).
3) Individuals in the *achievement* and *foreclosure* statuses will perceive lower levels of boredom during free time as compared to those in the *diffusion* statuses. This prediction was made based on Iso-Ahola and Weissinger (1987) finding that those with higher levels of awareness and agency (i.e., those in *achievement* and *foreclosure*) are less likely to experience boredom during free time.
4) Those in a*chievement* and *foreclosure* statuses will have lower perceptions of distress during free time as compared to those in the *moratorium* and *diffusion* statuses. In previous work on different types of anxiety (e.g., general, social), Schwartz et al. (2011) found these patterns among identity statuses and anxiety types.

Methods

Sample

College-attending emerging adults in a range of classes at a midsize southeastern university were invited to participate in the study during their respective class sessions in

the fall of 2014. Surveys were completed immediately after the invitation in the classroom; survey completion took no longer than 20 minutes. Classes surveyed included the disciplines of health science, education, leisure studies, chemistry, and sociology.

Measures

Dimensions of Identity Status (DIDS)

Identity status was measured using the Dimensions of Identity Development Scale (DIDS) (Luyckx et al. 2008). The 25-item scale utilizes a five-point Likert response scale strongly disagree to strongly agree) and includes five identity dimensions (exploration in breadth, exploration in depth, commitment making, identification with commitment, and ruminative exploration), each consisting of five items. Construct validity of the identity scale was found in previous work by investigating the correlations among the different identity dimensions and comparing the associations found among the dimensions to findings from other research (Luyckx et al., 2008). Validity was also supported by the findings from Schwartz et al (2011) as the study replicated the clusters using empirical, rather than a-priori, classification methods. Furthermore, concurrent validity was established by comparing the identity status clusters derived from the DIDS data to established measures of Erikson's concepts of identity synthesis and confusion (Schwartz et al., 2011). The findings were consistent with identity theory from Erikson and neo-Eriksonian scholars in that those in the *achievement* and *foreclosed* statuses demonstrated higher levels of identity synthesis than their *carefree diffusion* and *diffused diffusion* counterparts, whereas those in *carefree diffusion* and *diffused diffusion* possessed higher levels of identity confusion compared to individuals in *achievement* and *foreclosure*

statuses. Sample items from the DIDS include "I am considering a number of different lifestyles that might suit me" (exploration in breadth), "I think about whether the aims I already have for life really suit me" (exploration in depth), "I have decided on the direction I am going to follow in my life" (commitment making), "My plans for the future match with my true interests and values" (identification with commitment), and "I keep looking for the direction I want to take in my life" (ruminative exploration).

For the present study, reliabilities were calculated to ascertain the internal consistency of items for each subscale. The ruminative exploration dimension was altered due to one item's low internal consistency with the other items in the dimension. The removed item was "It is hard for me to stop thinking about the direction I want to follow in my life." The internal consistency increased from 0.84 to 0.86 as a result of this item's removal. The reliabilities for each identity dimension are as follow: *exploration in breadth* (α=0.85), *exploration in depth* (α=0.69), *commitment making* (α=0.93), *identification with commitment* (α=0.89), and *ruminative exploration* (α=0.86). As compared to previous findings with American samples (e.g., Schwartz et al 2010), the reliabilities are extremely similar with the exception of the *exploration in depth* identity dimension, although this previous research also suggests this is the least reliable identity dimension of the DIDS scale.

Perception of Free Time.

Perception of free time was measured using the Leisure Experiences Battery (LEBA; LEBYA) (Caldwell et al, 1992; Barnett, 2005). The scale has been used with adolescent and emerging adult populations to measure qualitative dimensions of the

leisure experience. The validity of the four subscales has been established in previous work by comparing theoretical relationships among the measures (i.e., nomological network) (Caldwell et al, 1992; Barnett, 2005; Barnett, 2011). The 19-item scale utilizes a seven-point Likert response scaled (strongly disagree to sternly agree) and consists of four subscales: *awareness* (e.g., "In the community where I live I am aware of exciting things to do in my free time"), *boredom* (e.g., "My friends and I often talk about how bored we are"), *challenge* (e.g., "I like free time activities that are a little beyond my ability"), and *distress* (e.g., "The worst feeling I know is when I have free time and don't have anything planned").

Similar to previous studies using this battery (Barnett, 2005), items that degraded internal consistency were removed; one item was removed from each subscale (Table 2.1). The resulting scale reliabilities following item removal were similar to those found with a previous emerging adult sample (Barnett, 2005) although the reliability for boredom was lower than found in previous research. The final reliabilities are as follow: awareness (α= 0.73), boredom (α= 0.66), challenge (α= 0.72), and distress (α= 0.73). Because previous research confirmed the independence of the subscales (awareness, boredom, challenge, and distress) (Barnett, 2005; 2011), the four perceptions of leisure were treated as such in this study. Consequently, there is no interpretable summative score for this scale.

Table 2.1: Items removed from the Leisure Experiences Battery

Item	Subscale	Subscale alpha prior to deletion	Subscale alpha following deletion
I've never really given much thought to whether free time could be good for me.	Awareness	0.56	0.73
I usually become very absorbed by what I do in my free time.	Boredom	0.64	0.66
If I think I might fail at an activity during my free time I won't do it.	Challenge	0.72*	0.72*
When I know I'm going to have some free time, I generally get anxious.	Distress	0.69	0.73

*Despite no change prior and following deletion, the analysis indicated that the scale reliability would improve. This question was also deleted in previous studies due to poor reliability.

Results

A total of 604 surveys were collected. Data inspection and cleaning included analysis for univariate and multivariate outliers and resulted in the removal of 39 cases (Tabachnick & Fidell, 2008). Less than 5% of the data were missing and no missingness patterns were found, thus the missing values were estimated using expectation maximization imputation through SPSS.

The present sample included 565 college-attending emerging adults, where 50% were women and the average age was 20.07 years (SD=2.97). Forty-four percent of the participants identified themselves as freshmen, 34.9% identified as sophomores, 11.9% as juniors, 7.8% as seniors, and the remaining 1.1% were graduate students or did not specify their class status. Regarding ethnicity, the sample was fairly homogeneous with 86.2% of participants identifying as White, 3.4% as African, 1.1% as Middle Eastern, 1.1% as East Asian, 0.9% as South Asian, and 6.4% as other ethnicity or did not specify.

The majority of the participants were single (64.8%), 32.6% were in relationships, and the remaining 3.0% were engaged, married, or did not specify their respective relationship status. Finally, 75.8% of the participant did have a job during the school year, 17.0% worked less than 20 hours per week, 5.4% worked between 21-39 hours, 0.5% worked 40 hours or more, and 1.4% did not specify their work status.

Identity status clusters

The identity status clusters were created using the data from the Dimensions of Identity Development Scale (DIDS; Luyckx et al., 2008). Ward's method, a version of hierarchical cluster analyses, and Euclidian squared distance were used to identify the best cluster solution. As conducted in previous research (i.e., Schwartz et al., 2011), a range of cluster solutions was examined to find the solution that best fit the data, including four-, five-, six-, and seven-cluster solutions. The cluster results indicated five or seven clusters based on the dendrogram and agglomeration index, with the five-cluster solution mirroring the cluster solutions found in Schwartz et al (2011).The exception was that in previous work by Schwartz and colleagues, they found six clusters, with one being an undifferentiated status (i.e., moderate levels of all identity dimensions). However, the present study did not have a cluster that mirrored this pattern. Instead the clusters found in this study mirrored the named clusters in previous work. Thus, the five-cluster solution was chosen for the remaining analyses and can be seen in Table 2.2. The mean scores for each dimension of the DIDS scale were mean-centered for clearer interpretation. Following the labels indicated by Luyckx et al. (2008a, b), Meeus et al (2010), and Schwartz et al (2011), the clusters were named *achievement* (n=136), *ruminative*

exploration (n=173), *foreclosure* (n=34), *diffused diffusion* (n=84), and *carefree diffusion* (n=138). The *achievement* cluster was above the mean on the commitment dimensions, exploration in depth, and exploration in breadth, but low on ruminative exploration. The *ruminative exploration* cluster was moderately elevated above the mean on the exploration dimensions, and just below the mean on commitment dimensions. These individuals are moderately committed to a set of identity options but are open to exploring other options. Despite having existing identity commitments, they will easily forego the existing commitments for the sake of new identity possibilities (Meeus et al, 2010). The *foreclosed* cluster was high on levels of commitment dimensions, low on ruminative exploration, and low on exploration in breadth. However, the exploration in depth was slightly above the mean, suggesting that these individuals continue to dig deeper into their existing identity commitments. The *diffused diffusion* cluster was well below the mean on commitment indices, and included the highest levels of ruminative exploration. The exploration in breadth was above the mean, suggesting some identity work occurring, but this exploration does not extend to exploration in depth as the dimension was below the mean. The *carefree diffusion* cluster included low levels of exploration and moderate levels of commitment, suggesting that these individuals are happy with no exploration and little commitment. See Figure 2.1 for a visual display of the identity clusters.

Differences among identity status clusters

Identity status clusters were tested for differences among demographic factors, including class year, employment (working vs. not working), and gender. Chi-square

tests were conducted. No significant differences were found for class year (χ^2=21.75, df=16, p=.15), employment (χ^2=8.34, df=4, p=.08), or gender (χ^2=5.72 df = 4 p=.22).

Perception of free time across identity statuses

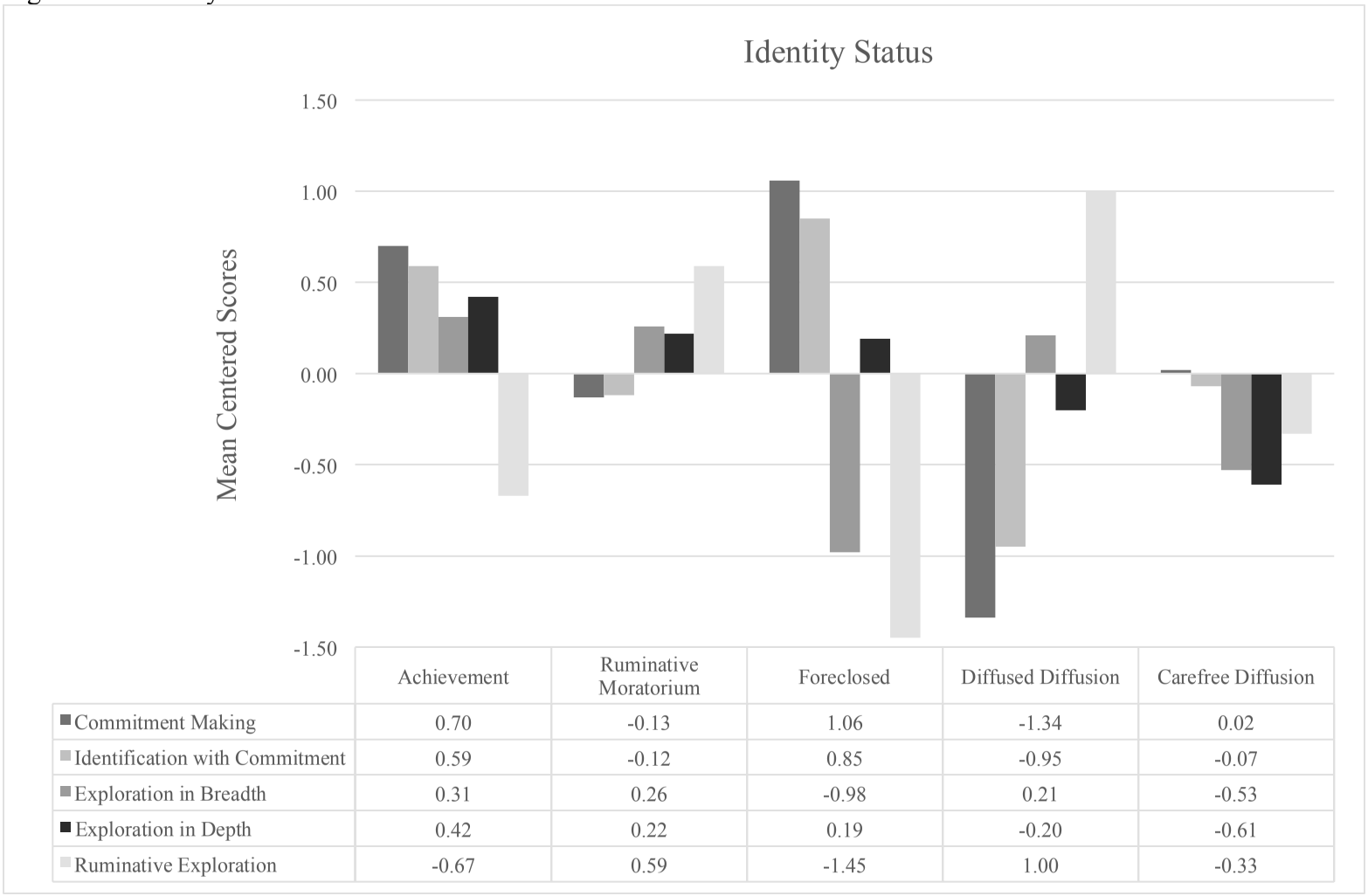
The purpose of this research was to determine the extent to which the perception of free time was differentiated by the identity status clusters. A multivariate analysis of variance (MANOVA) on perception of free time (LEBYA) by identity cluster yielded a significant multivariate effect, Wilks' λ =.91, F(16, 1702)=3.41, p<.001, η^2=.024. The LEBYA dimensions of awareness, boredom, and challenge were found to be significantly different among identity status clusters (Table 2.3). No effect was found for distress. For the awareness dimensions, individuals in the *achievement* cluster stated they had greater awareness of opportunities, resources, and things to do within the community during their free time as compared to those in the *ruminative moratorium* and *diffused diffusion* clusters. Similarly, those in the *foreclosed* cluster stated that they had greater awareness of what they could do during their free time as compared to those in the *diffused diffusion* cluster. The effect size for the awareness dimension was small at 0.05. In the boredom dimension, those in the *diffused diffusion* identity cluster stated that they experienced greater amounts of boredom during their free time as compared to individuals in the *ruminative moratorium*, *achievement*, and *foreclosed* statuses. *Diffused diffusion* was also higher in boredom as compared to those in *carefree diffusion*, although the *p*-value was outside the acceptable significance cutoff at 0.054. The effect size for the boredom dimension was also small at 0.04. In the challenge dimensions, individuals in the

Table 2.2: Mean centered scores for the DIDS variables by identity status cluster

	Achievement (*n* =136)	Ruminative Moratorium (*n*=173)	Foreclosed (*n* =34)	Diffused Diffusion (*n* =84)	Carefree Diffusion (*n* =138)
Commitment Making	0.70 (0.48)	-0.13 (0.50)	1.06 (0.32)	-1.34 (0.53)	0.02 (0.67)
Identification with Commitment	0.59 (0.46)	-0.12 (0.47)	0.85 (0.41)	-0.95 (0.49)	-0.07 (0.57)
Exploration in Breadth	0.31 (0.46)	0.26 (0.52)	-0.98(0.77)	0.21 (0.39)	-0.53 (0.67)
Exploration in Depth	0.42 (0.48)	0.22 (0.35)	0.19 (0.62)	-0.20 (0.48)	-0.61 (0.51)
Ruminative Exploration	-0.67 (0.59)	0.59 (0.68)	-1.45 (.035)	1.00 (0.53)	-0.33 (0.66)

Standard deviations are in parentheses

Figure 2.1: Identity status cluster solution



	Achievement	Ruminative Moratorium	Foreclosed	Diffused Diffusion	Carefree Diffusion
Commitment Making	0.70	-0.13	1.06	-1.34	0.02
Identification with Commitment	0.59	-0.12	0.85	-0.95	-0.07
Exploration in Breadth	0.31	0.26	-0.98	0.21	-0.53
Exploration in Depth	0.42	0.22	0.19	-0.20	-0.61
Ruminative Exploration	-0.67	0.59	-1.45	1.00	-0.33

Table 2.3: Free time experiences by identity cluster

	(1) Ruminative Moratorium (*n*=173)	(2) Achievement (*n* =136)	(3) Carefree Diffusion (*n* =138)	(4) Diffused Diffusion (*n* =84)	(5) Foreclosed (*n* =34)	*F* Ratio	η^2	Post-hoc Findings[a]
Awareness	5.17 (0.08)	5.58 (0.09)	5.25 (0.09)	4.96 (0.11)	5.65 (0.18)	3.57***	0.05	2 > 1, 4; 5 > 4
Boredom	2.40 (0.06)	2.28 (0.07)	2.39 (0.07)	2.73 (0.09)	2.00 (0.14)	6.47***	0.04	4 > 1, 2, 3[b], 5
Challenge	4.58 (0.07)	4.68 (0.08)	4.31 (0.07)	4 .41 (0.10)	4.59 (0.15)	3.57**	0.03	2 > 3
Distress	2.90 (0.10)	2.94 (0.11)	2.84 (0.11)	2.94 (0.14)	2.80 (0.23)	0.16	0.00	

Standard deviations are in parentheses
[a] Findings significant at p=0.05 or less.
[b] Approached significance at p =0.054.
**$p < 0.01$
***$p < 0.001$

achievement status enjoyed higher levels of challenge during their free time as compared those in the *carefree diffusion* status. The effect size for the challenge dimension was small at 0.03. Anecdotally, other significant findings may not been found due to small sample sizes within clusters, particularly for the *foreclosed* cluster.

Discussion

Theoretical findings

The Dimensions of Identity Development Scale has previously been used to investigate the structure of identity formation as proposed in the work of Marcia and Meeus (e.g., Luyckx et al., 2008; Schwartz et al., 2011). The present study utilizes the DIDS scale to investigate the identity configurations of emerging adults among a homogeneous population. Further, it confirms the pattern of clustering of identity statuses from previous work with relatively few deviations. The caveat to this confirmation is that the patterns of identity dimensions among unique clusters seems to be less pronounced (i.e., not as extreme) when compared to research using larger samples (e.g., Schwartz et al., 2011). Still, the patterns are similar to the patterns found in work using the DIDS instrument (see Luyckx et al., 2008).

The five-cluster solution found includes an *achievement* cluster, a *foreclosed* cluster, two *diffusion* clusters and a cluster representing a version of *moratorium*. No *undifferentiated* identity cluster emerged from the data. It is important to note that the specific type of moratorium found with the present study follows Marcia's moratorium

status (also found by Luyckx et al., 2005, 2008) where there are high levels of exploration for all three dimensions and relatively low levels of two commitment processes. The *ruminative moratorium* cluster found in the present study represents individuals who have suspended any commitments for the sake of exploring identity options. This version of moratorium is compared against another variant of moratorium found by Schwartz et al. (2011) in which the cluster had high levels on the two commitment dimensions as well as high levels on the three exploration dimensions as searching moratorium.

The *foreclosed* status was similar to previous research with the exception of a higher level of exploration in depth (Luyckx et al, 2008; Schwartz et al., 2011). It appears that within this sample, these *foreclosed* individuals continue to dig deeper into the identities to which they have already committed. It may be that these individuals continue to explore their identities in depth as a means to reaffirm and protect these identities from potential identity-threatening experiences and information.

Association with Perceptions of Free Time

This research extends previous work that used identity status as a means to differentiate among pathways of experiencing emerging adulthood (Schwartz, 2005). Specifically this research provides insight into how emerging adults perceive their free time (freedom). Previously, emerging adults have been found to differ in their perceptions of the dimensions of free time (awareness, boredom, challenge, distress) according to gender and ethnicity (Barnett, 2005). This research extends that understanding to an individual's personal identity (i.e., the perception of how an

individual's inner goals, values, and beliefs fit and align with external factors of parents, peers, community and society at large).

Unsurprisingly, individuals in the *achievement* status perceive that there are ample things to do within the community in which they live and they know where to go to seek out those opportunities. This finding aligns with past research in that emerging adults with higher levels of identity commitment have higher levels of information-seeking behavior as compared to those who are still exploring their identities (Berzonsky, 1998). Because those in *achievement* are committed to an identity, finding opportunities during free time that align with that identity appears to be a much easier process than it is for those who are still exploring their identity. The *achievement* status is associated with low levels of boredom, which may be explained as a byproduct of leisure awareness. Iso-Ahola and Weissinger (1987) specifically stated that lower perceptions of leisure boredom were associated with a greater awareness of the value of leisure and the lower perception of constraints on leisure. It is not to say that those in *achievement* do not encounter constraints, but it is possible that because of their existing identity capital they may be more able to navigate those constraints (Côté, 1997, 2000; Côté & Levine, 2002; Côté & Schwartz, 2002). The *achievement* group also had the greatest desire to be challenged during free time activities, which aligns well with the developmental individualization process as described by Côté and Schwartz (2002). As such, due to their challenge-seeking behavior those in the *achievement* status may be more likely to achieve flow experiences during free time and find personal expressiveness through their leisure experiences.

Individuals in *ruminative moratorium* are less likely to know of opportunities and ways to spend their free time than those in the *achievement* status, but do not differ than from the other identity groups in their awareness. This finding is a slight deviation from Bezonsky's claim that those in *achievement* and *moratorium* have broadly the same information-seeking behavior (1989; 1990). The glimmer of hope concerning the *ruminative moratorium* status is that these individuals show interest in seeking challenge during free time, thus symbolizing an effort to develop in a personally meaningful way (i.e., developmental individualization) (Côté & Schwartz, 2002). In fact, the status's challenge mean falls near the mean challenge perceived by the *achievement* and *foreclosure* statuses. Thus, seeking out challenging activities during one's free time may be a way that those in the *ruminative moratorium* status attempt to navigate the self-discovery process. However, the lack of awareness of how to spend one's free time may cognitively and affectively impair the self-discovery processes occurring during free time.

The *foreclosed* status reported being most aware of things to do with their free time, and also reported being the least bored during their free time. Although it cannot be determined with these findings, there is a possibility that due to their self-protective nature (Bezonsky, 1989; 2004), the *foreclosed* individuals are unlikely to report a lack of awareness or high amounts of boredom even if they perceive it. The status also had high levels of challenge that mirror those of the *achievement* and *ruminative moratorium* statuses. Another interesting point to consider is the possibility that those in *foreclosure* fundamentally perceive their free time as a way to reaffirm existing identities. That is,

these individuals may seek out information and challenge themselves during free time in order to further deepen their commitments to a particular identity, leisure or not, and avoid exploration of other identity-relevant opportunities.

The *diffused diffusion* status is the most concerning in terms of the individuals' perceptions of free time. These individuals have the least amount of awareness of free-time opportunities and consequently experience high amounts of boredom. These findings were expected as previous identity researchers have suggested that those who lack firm commitments may not possess the information-seeking behavior, capital, or self-esteem by which to navigate the freedom of emerging adulthood (Côté, 1997, 2000; Côté & Levine, 2002; Côté & Schwartz, 2002). With relatively low desires for challenge (i.e., default individualization) as compared to the other statuses (Côté & Schwartz, 2002), this group is unlikely to take advantage of potential identity-building activities during free time not because of the lack of desire, but because of the lack of knowledge and self-esteem.

Individuals in the *carefree diffusion* status have high levels of awareness of how to spend their free time and relatively moderate levels of boredom (i.e., similar to that of the *achievement* status). However, the individuals in this identity status do not desire challenge during their free time. As stated in previous work on identity (Côté & Schwartz, 2002; Schwartz et al., 2005), those in *carefree diffusion* often avoid challenging activities mostly due to indifference and are more likely to focus on peer and societal influences (i.e., default individualization). Thus, it is the characteristics of the

group to have the resources and knowledge, but not care to engage in identity-building experiences.

Implications for Practice

For those working with emerging adults in counseling settings, this research emphasizes the need for counselors to discuss use of free time and the qualitative dimensions of the experiences during free time. Perhaps some emerging adults are not aware of how they currently use their free time or may not perceive that they have free time at all. A good exercise would be for individuals to keep a time-use diary where any time spend outside of class or work is logged in terms of its duration and its use. Additionally, interventions that help emerging adults make use of their free time in productive ways might be developed. For example, a traditional leisure education program might be offered that focuses on developing knowledge on when and where leisure is possible and helping to provide strategies that help emerging adults navigate constraints to healthy use of free time (e.g., developing coping skills to avoid boredom) (Datillo, 1999). Offering a second type of leisure education program that strongly focuses on the self-discovery processes might push emerging adults to find personally expressive activities, challenge themselves, and search for activities that work well with their skills, beliefs, and goals. These programs may be heavily rooted in a variety of leisure activities, such as yoga, outdoor recreation, and art-based activities.

For those working with emerging adults in settings that revolve around recreation and use of free time (e.g., campus recreation, student affairs), there is a need to communicate the importance of leisure involvement for the sake of identity formation.

Duerden, Widmer, Taniguchi, and McCoy (2009) found that adolescents who participated in a two-week structured adventure recreation program decreased in diffuse/avoidant identity style and increased in the informational and normative identity style subscales. Thus, leisure programming may be an optimal avenue for increasing awareness of leisure skills, opportunities and companions, decreasing boredom and navigating constraints typically found during free time, and challenging oneself in the search of self-discovery and self-actualization.

Alternatively, for those working with adolescents and emerging adults in recreation settings, it would be appropriate to recognize the stage of identity development that each individual is currently experiencing. Their behaviors, attitudes, and general approach to life and leisure may illustrate their level of identity formation. As such, the mentoring processes that often occur in leisure settings may benefit from an understanding of identity formation, and mentors may need to develop innovative and intentional solutions to navigate inherent challenges associated with each identity status while helping individuals move their identity work forward.

Limitations

The present study does have its limitations. First, the findings were derived from self-reported measures of identity and perceptions of free time. Despite being used in several leisure-based studies, the LEBYA has only been validated by establishing a nomological network in which the observed constructs (e.g., awareness and boredom) are compared to each other and evaluated based on how they align with theoretical reasoning.

The findings of this research should be considered cautiously, and future psychometric work on the LEBYA should be pursued.

Second, in no way did this research explore actual behaviors during free time. In future research, the validity issues inherent in quantitative self-report data (e.g., social desirability) may be combatted by measuring behavioral and cognitive approaches undertaken, exploring decision making processes, and/or by using multiple informants to triangulate findings (Luyckx et al., 2008). Also, quasi-experimental designs and/or observational data might be used to provide further insight into how one navigates and makes decisions about free time. Additional attention should also be paid to the potential influence of context, including how one's peer group or involvement in social organization differentially affects one's perception of free time. For example, how do emerging adult peer groups comprised of individuals from different identity statuses navigate free time? If a peer group consists mainly of individuals from the diffusion statuses, will the navigation and use of free time be a case of "the blind leading the blind"?

Third, there are limitations in the sample itself. The data were collected from a relatively homogeneous group of college-attending emerging adults. Future studies should collect data in diverse settings to increase our understanding of the intersectionality of personal identity as described in the present study with social identities such as gender and ethnicity. Also, this study strictly focused on college-attending emerging adults and did not explore those who fall within the 18-25 age range

but do not attend college. Future research, particularly in the leisure field, should focus on the navigation of free time for those who do not attend college.

Fourth, the cluster produced uneven cluster sizes (i.e., there were five times more individuals in *ruminative exploration* as compared to *foreclosed*), and therefore may have limited the ability to find significant effects among the differing identity clusters. Despite the limitations, significant differences were found even for the smallest cluster size (Foreclosed; n=34). Larger sample sizes may reveal further findings concerning the differing perceptions of free time among emerging adults. Also, as indicated by the standard deviations associated with the perceptions of free time by identity status, the *foreclosure* status demonstrated the least "tightness", or agreement on the perceptions, when compared to the other identity status clusters. This findings associated with this cluster should be interpreted with caution.

Fifth, the effect sizes were small, indicating that there are other intrapersonal and interpersonal factors that may explain the relationship perception of free time among emerging adults. These small effect sizes may also be by-products of comparing global identity—one's sense of self—with domain-specific attitudes of perceptions of free time. Future research should consider comparing a domain-specific identity, such as leisure identity, with perceptions of free time among emerging adults.

Despite these limitations, the present study has generated important knowledge concerning our understanding of how free time inherent in the emerging adulthood developmental period is differentially perceived among individuals clustered into identity statuses. Specifically, it shows that emerging adults have fundamental differences in their

navigation of free time, with the perceptions of those from the diffusion statuses causing the most concern. As emerging adults move toward adulthood responsibilities, their approach to free time and their ability to achieve work-life balance will be paramount for lifespan trajectories, including work productivity, family functioning, etc. Thus, more research is needed to understand the intersectionality of leisure and psychosocial identity development, with specific focus paid to how free-time pursuits can be used to promote adaptive identities.

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CHAPTER THREE

Understanding the Perception of Free Time among College-Attending Emerging Adults: Implications for Health-Related Marketing Promotion

Introduction

Mental health among college-attending emerging adults is a growing health concern (Castillo & Schwartz, 2013; Eagan et al., 2014) and considerable research has been carried out to understand the individual and contextual correlates of their mental health in order to effectively promote health behaviors in college (e.g., Byrd & McKinney, 2012; Eisenberg, Hunt, Speer, Zivin, 2011; VanKim & Nelson, 2013). One method of research uses social marketing efforts which involve segmenting students into groups based on various attitudinal, cognitive, and psychological factors in order to target and/or personalize health messages (e.g., Primack, Kim, Shensa, Sidani, Barnett, & Switzer, 2012; Suragh, Berg, & Nehl, 2013; York, Brannon, & Miller, 2012). It is with this marketing approach that those working in student health and their related settings (e.g., campus recreation) might be better able to influence the health behaviors of groups of college students with differing characteristics.

Emerging adulthood is a developmental period characterized by the onset of increased amounts of freedom and the increased need to direct and self-regulate one's emotions and behaviors (Arnett, 2004). Some emerging adults may utilize the freedom associated with emerging adulthood for positive health-relevant activities (e.g., activity participation, identity development, sense of belonging). However, for others this freedom may lead to health-compromising behaviors (e.g., mental health issues).

Moreover, the use of freedom and free time during emerging adulthood may lead to differential lifespan trajectories into adulthood in areas such as work-life balance, health maintenance, etc.

For the present study, we explored emerging adults' perceptions of free time, which should be considered when developing and marketing health programming, events, and services as emerging adults vary in their attitudes toward navigating free time. Thus, to better understand the perceptions of free time of emerging adults, we developed segmented groups based on four perceptions of free time (awareness, boredom, challenge, distress) and examined the differences among the groups in terms of well-being, identity-related dimensions, and activity participation. The purpose of this research was to better understand how perceptions of free time may be linked to mental health among emerging adults so that appropriate marketing and programming may be developed.

Well-being among College-Attending Emerging Adults

Emerging adulthood, or the developmental life phase coinciding with the college years, is marked with high amounts of freedom, flexibility, opportunity, and increasing responsibilities; however, the lack of structure and/or poor person-environment fit can lead to floundering, rumination and brooding that may adversely affect mental health (Burwell & Shirk, 2007; Schulenberg, Sameroff & Cicchetti, 2004). Thus, emerging adulthood is a critical time for the identification and management of potential mental health issues, stress-coping strategies and support systems (Kessler, Berglund, Demler,

Jin, Merikangas, & Walters, 2005; Nelson, Story, Larson, Nuemark-Sztainer, Lytle, 2008).

Two widely-used indicators of mental health are depression and self-esteem. Depression is an affective disorder that is characterized by a lack of interest in daily activities, lack of energy, and feelings of worthlessness (American Psychiatric Association, 1994). According to the Spring 2014 American College Health Association-National College Health Assessment II report on student health (ACHA, 2014), 12.1% of undergraduates reported being diagnosed or treated by a professional for depression issues during the spring 2014 semester. Beyond official diagnosis and treatment, 33.3% of all undergraduate students reported that at one point in the past year they had felt so depressed that it was hard to function. The increasing prevalence of mental health issues among the emerging adult population has caused higher demands for health services on college campuses, and has produced conversations about informal provisions (e.g., gatekeeper programs, buddy programs) of health education (Hunt & Eisenberg, 2010; Watkins, Hunt, & Eisenberg, 2012).

Self-esteem is one's subjective evaluation of his or her worth (Chung, Robins, Trzesniewski, Noftle, Roberts, &. Widaman, 2014). Mean levels of self-esteem change over the college period, with self-esteem hitting a low during the first semester of college, then rebounding by the end of the freshmen year and showing a slight increase for the duration of the college experience (Chung et al., 2014). Low self-esteem is a risk factor for depression or, in other words, low self-esteem during emerging adulthood is a predictor of experiencing depression during emerging adulthood (Orth, Robins, &

Roberts, 2008). Alternatively, self-esteem acts as a protective factor against depressive symptoms (e.g., Costello, Swendsen, Rose, & Dierker, 2008).

Identity Development

A major developmental task of adolescence and emerging adulthood is that of identity formation (Arnett, 2000). Identity formation and its associate variables has been used to understand positive functioning (e.g., self-esteem, meaning in life), negative functioning (e.g., depression), and health-compromising behaviors (e.g., risky sexual behaviors, drug use) among emerging adults (e.g., Schwartz et al., 2011). For example, emerging adults with high levels of identity commitment scored lower on measures of depression and higher on measures of self-esteem (Hardy, Francis, Zamboanga, Kim, Anderson, & Forthun, 2014), whereas those who are still exploring their identity possessed higher levels of depressive and anxiety symptoms, and lower levels of self-esteem (Luyckx et al., 2008).

Moreover, identity development is also related to how individuals seek out and process identity-related information and experience challenge. Emerging adults with higher levels of identity commitment have higher levels of information-seeking behavior as compared to those who are still exploring their identities (Berzonsky, 1998), meaning they may be more aware or more willing to seek out information about ways to use their free time. Moreover, individuals with committed identities are more likely to challenge themselves through identity-related and self-development activities (Côté & Schwartz, 2002).

Perception of Free Time

Leisure is often defined as a subjective experience that is based solely on an individual's personality, perceptions, and interests (Kleiber, 1999). In order to understand the subjective experience of leisure and free time among adolescents, the Leisure Experience Battery for Adolescents (LEBA) was established based on previous work by leisure scholars such as Iso-Ahola and Weissinger (Caldwell, Smith & Weissinger, 1992). Barnett (2005) also verified the battery of scales with the emerging adult population (LEBYA). Four dimensions of perception of free time are leisure awareness, leisure boredom, leisure challenge, and leisure distress.

Leisure Awareness.

Leisure awareness includes the understanding and appreciation of leisure benefits, interests and resources (Dattilo, 1999). Barnett (2005) suggested that leisure awareness acts "as a necessary antecedent to the decision to engage in a leisure pursuit [or] as a deficit or constraining condition to a satisfying or richly diverse leisure repertoire" (p. 131). Emerging adults who are more aware of leisure resources are less bored in their free time (Barnett, 2005). Also, leisure awareness has been identified as a protective factor against depressive mood states (Han, 2007). Leisure awareness has by and large been addressed and researched in conjunction with leisure education interventions for the elderly, individuals with disabilities, and middle and high-school adolescents (e.g., Baldwin, Caldwell, Smith, & Walls, 2004; Carbonneau, Martineau, Andre, & Dawson, 2011; Nour, Desrosiers, Gauthier, & Carbonneau, 2002).

Leisure Boredom.

Leisure boredom is "the subjective perception that available leisure experiences are not sufficient to instrumentally satisfy needs for optimal arousal" (Iso-Ahola & Weissinger, 1990, p. 4). Scholars suggest that leisure boredom, in combination with individuals' desire for fun and excitement, peer approval, and coping with negative emotions, may lead to negative psychosocial functioning and health-compromising behaviors (Cooper, Shapiro, & Powers, 1998; Miller, Caldwell, Weybright, Smith, Vergnani, & Wegner, 2014). Leisure boredom is negatively correlated with positive functioning in that college students who have high levels of leisure boredom have low levels of self-esteem (Yang & Guo, 2011). Further, leisure boredom is also associated with detrimental health behaviors, such as risky sexual behavior, smoking and alcohol use (e.g., Caldwell & Smith, 1995; Miller et al., 2014). Factors that protect against perceptions of leisure boredom include a larger leisure repertoire, lower perception of leisure constraints, greater value placed on leisure, high leisure ethic, lower work ethic and higher self-motivation (Barnett, 2005; Iso-Ahola & Weissinger, 1990; Wegner & Flisher, 2009).

Leisure Challenge.

Leisure challenge acts as a motivating factor for the purposes of optimal arousal and flow experiences during leisure in the short-term, and for sustained interest and continued participation in a leisure activity in the long-term (Mannell & Kleiber, 1997). Barnett noted that one's attitude toward leisure challenges takes on different dimensions, including the preference to push one's physical and/or mental abilities, the willingness to

try new or unknown challenges, and attitudes toward trying an activity even though one might fail (Barnett, 2005). For emerging adults, experiencing challenge during one's leisure is negatively associated with leisure boredom (Barnett, 2005).

Leisure Distress.

Barnett noted that leisure distress "focus[es] solely on the affective dimension of having unfilled free time, and encapsulate[s] it as a negative affective response" (2005, p. 134). The factor teases out two separate ideas related to leisure distress: (1) whether or not the individual has plans for free time, and (2) the individual's feelings toward having nothing to do or no plans for leisure time. Barnett (2005) found that individuals more consistently reported their reactions to making plans, but were more diverse in their responses in how they would feel about not having plans. However, emerging adults who experienced low levels of distress when having no plans were also more likely to become bored during leisure time (Barnett, 2005; Gokturk, 2009). Barnett suggested that, despite extensive theoretical and empirical work elsewhere, the multidimensionality of anxiety and distress in conjunction with leisure planning had not been adequately addressed in leisure literature.

Because freedom is an inherent characteristic of the college student experience, this quantitative research sought to understand the various perception profiles of free time among college-attending adults. Moreover, this research investigated how these profiles correlated with regular activity involvement, well-being, and identity measures in order to better understand how social marketing in college health and recreation settings might

be adapted to meet the students' needs and unique characteristics. The research questions are as follow:

1. Do emerging adults exhibit unique profiles of perceptions of free time according to reported levels of awareness, boredom, challenge, and distress?
2. Do the perception profiles differ in regular activity involvement, well-being, and identity measures?

Methods

Participants and Procedures

College-attending emerging adults in a range of classes at a midsize southeastern university were invited to participate in the study during their respective class sessions during the fall of 2014. Surveys were completed immediately after the invitation in the classroom; survey completion took no longer than 20 minutes. Classes surveyed included the disciplines of health science, education, leisure studies, chemistry, and sociology.

Measures

Perception of Free Time.

Perception of free time was measured using the Leisure Experiences Battery (LEBA; LEBYA) (Caldwell, et al., 1992; Barnett, 2005). The scale has been used by the aforementioned references with adolescent and emerging adult populations to measure qualitative dimensions of the leisure experience. The 19-item scale utilizes a seven-point Likert response scale ("strongly disagree" to "strongly agree") and consists of four subscales: *awareness* (e.g., "In the community where I live I am aware of exciting things to do in my free time"), *boredom* (e.g., "My friends and I often talk about how bored we

are"), *challenge* (e.g., "I like free time activities that are a little beyond my ability"), and distress (e.g., "The worst feeling I know is when I have free time and don't have anything planned"). Thus, higher values on the aforementioned subscales indicate a higher perception of the respective dimension about free time. Because previous research confirmed the independence of the subscales (awareness, boredom, challenge, and distress) (Barnett, 2011), the four perceptions of leisure were treated as such in this study. Consequently, there is no interpretable summative score for this scale. The validity of the four subscales has been established in previous work by comparing theoretical relationships among the measures (i.e., nomological network) (Caldwell et al, 1992; Barnett, 2005; Barnett, 2011).

For the present study, and similar to previous studies using this battery (Barnett, 2005), items that degraded internal consistency were removed; one item was removed from each subscale. The resulting scale reliabilities following item removal were similar to those found with an emerging adult sample (Barnett, 2005) although the reliability for boredom was lower than found in previous research. In the present study, the subscales demonstrate moderate to high levels of internal consistency: awareness (α=0.73), boredom (α= 0.66), challenge (α= 0.72), and distress (α= 0.73).

Amount of Free Time.

Before the participants answered the questions regarding their perceptions of free time, they were asked to answer the following question regarding their perception of the amount of free time: "In general, I have a sufficient amount of free time during the

week." The potential responses ranged from "strongly disagree" to "strongly agree" on a seven-point Likert-type scale.

Regular Participation in a Leisure Activity.

Participants were asked the following question regarding participation in a leisure activity: "Is there a leisure activity in which you regularly participate?" Leisure was defined for the participants in the directions of the survey as "any activity you find enjoyable." The question had a dichotomous (yes/no) response format.

Well-Being.

Rosenberg Self Esteem Scale. Self-esteem was measured using Rosenberg's Self Esteem Scale consisting of 10 items (Rosenberg, 1965). The responses fall on a Likert type scale, with 0 representing "strongly disagree" to 3 representing "strongly agree". A composite score is created from the responses and ranges between 0 and 30, with a higher composite score representing higher self-esteem. The scale reliability for the present study was 0.89. Sample items include "I feel that I have a number of good qualities" and "I feel I do not have much to be proud of."

Depressive Symptoms. Depressive symptoms were assessed using the 20-item version of the Center for Epidemiologic Studies Depression (CES-D) Scale which assesses cognitive, somatic, and psychological symptoms of depression over the past week (Radloff, 1977). The responses fall on a Likert type scale, with 0 representing "rarely" and 3 representing "most of the time". A composite score is created by summing the item responses and can range from 0 to 60, with 60 representing the highest level of depression. The internal consistency for this scale was .89 in the present study. Sample

items from this scale include “I was bothered by things that usually don’t bother me” and “I felt sad.”

Identity Measures

Identity Commitment. Identity commitment was measured using the Identification with Commitment subscale from the Dimensions of Identity Development Scale (DIDS; Luyckx et al., 2008). The response ranged from “strongly disagree” to “strongly agree” on a five-point Likert type scale. The scale reliability for the present study was sufficient (α=0.89). A sample question reads as follows: “Because of my future plans, I feel certain about myself.” Construct validity of the identity commitment subscale was found in previous work by investigating the correlations among this and other identity dimensions and comparing the associations found among the dimensions to findings from other research (Luyckx et al., 2008).

Ruminative Exploration. Ruminative exploration was measured using the Ruminative Exploration subscale from the Dimensions of Identity Development Scale (DIDS; Luyckx et al., 2008). The scale is a five-point Likert type scale, with the responses ranging from “strongly disagree” to “strongly agree”. A sample question reads as follows: “It is hard for me to stop thinking about the direction I want to follow in my life.” Validity of the ruminative exploration subscale was found in previous work by investigating the correlations among this dimension and other theoretical measures related to identity exploration. For example, Luyckx et al (2008) found that ruminative exploration was uniquely associated with higher levels of self-rumination from the Rumination-Reflection Questionnaire (RRQ; Trapnell & Campbell, 1999), higher levels

of depressive symptoms and anxiety symptoms, and lower levels of self-esteem. These findings also met theoretical expectations that an individual who engaged in ruminative exploration will exhibit poorer functioning than an individual who has committed to a particular identity. The reliability for the scale in the present study was sufficient (α=0.86).

Data Analysis

A total of 604 surveys were collected. Data inspection and cleaning included analysis for univariate and multivariate outliers and resulted in the removal of 39 cases (Tabachnick & Fidell, 2008). Less than 5% of the data were missing and no missingness patterns were found, thus the missing values were estimated using expectation maximization imputation through SPSS. A hierarchical cluster analysis using Ward's method was used to segment participants into groups based on their perceptions of free time. According to Havitz et al. (2013), "cluster analysis is an appropriate segmentation technique when independent variables are measured at interval or ratio levels and no a-priori expectations are evident regarding the number or composition of segments are expected" (p. 51). Once segmentation was completed, ANOVA and chi-square tests were used where appropriate to explore the differences among involvement clusters in their perceptions of free time, measures of well-being, and identity dimensions.

Results

Descriptive statistics.

Table 3.1 outlines selected demographics of the sample of 565 college-attending emerging adults. The average age of the sample was approximately 20 years of age, and

about half of the sample were women (49.7%). The majority of the sample did not work during the school year (75.8%) and were underclassmen (e.g., freshmen or sophomores; 79.3%).

Table 3.2 provides descriptive statistics for the key variables in this study. For the qualitative dimensions of free time, emerging adults on average reported being well-aware of the importance of free time as well as how to spend their free time within the community in which they lived (M=5.29), experiencing low levels of boredom during their free time (M=2.39), somewhat enjoying activities that challenge them during their free time (M=4.51), and experiencing low levels of distress or anxiety when they were

Table 3.1: Selected demographic characteristics of study participants

Sample Characteristics	N	%
Total	565	100.0%
Age		
Mean (SD)	20.07 (2.97)	
Gender		
Female	281	49.7%
Male	297	49.4%
Other	2	0.7%
Missing	7	1.2%
Employment Status		
Not working	428	75.8%
Working	129	22.8%
Missing	8	1.4%
Class Year		
Freshmen	251	44.4%
Sophomore	197	34.9%
Junior	67	11.9%
Senior	44	7.8%
Other	1	0.2%
Missing	5	0.9%

experiencing free time (2.89). The mean self-esteem composite score for the sample was 22.88 on a 1-30 scale whereas the mean depression score was 12.07 on a 1-60 score. The

mean score for identity commitment was 3.74, which indicated that on average the participants agree that they have made identity commitments they are happy with whereas the mean score for ruminative exploration was 2.76, which indicated that on average the participants do not spend large efforts in contemplating and/or obsessing about their identities.

Perception clusters.

Because of the exploratory nature of this research, we had no a priori reasoning as to the number of perception groups in our sample. We clustered the data using the mean scores from the four qualitative perceptions of free time (awareness, boredom, challenge,

Table 3.2: Descriptive statistics for key study variables

Variable	N	Mean	SD
Perception of Free Time[1]			
Awareness	565	5.29	1.04
Boredom	565	2.39	.82
Challenge	565	4.51	.89
Distress	565	2.89	1.32
Well-Being			
Self-Esteem[2]	565	22.88	4.95
Depression[3]	565	12.07	8.64
Identity Measures[4]			
Identity Commitment	565	3.74	.71
Ruminative Exploration	565	2.76	.95

[1]Measured on a 7-point Likert type scale, where higher values indicate greater perception of the element during free time.
[2] Maximum possible score for self-esteem is 30.
[3] Maximum score possible for depression is 60, with a score of 16 or greater representing the possibility of clinical depression (Lewinsohn et al., 1997).
[4] Measured on a 5-point Likert type scale, where higher values indicate greater prevalence of identity dimension.

distress), specifying three to five groups. After comparing the patterns in each of the cluster solutions, the four-cluster solution was determined to be the most viable for comparison purposes. The scores for the four groups differenced significantly from each other ($p<.001$) on the measures of awareness and boredom (Table 3.3). Although less defined, the clusters also showed partial uniqueness on the measures of challenge and distress. All clusters were deemed substantial in that the smallest group (n=78; *free time extremists*) accounted for 14% of the total sample. The remaining clusters made up the following proportions of the total sample: *easy-goers* (n=183; 32% of sample), *achievers* (n=165; 29%), and *strugglers* (n=139; 25%). The selection of the four-cluster solution was also based on the ability to market to large, distinct profiles of the college student population. The five-cluster solution was rejected due to practicality, as it resulted in a cluster with only 6% of the sample (n=34) thereby making conclusions about additional marketing strategies for a smaller cluster unrealistic and perhaps a misuse of resources. This reasoning follows Kotler and Armstrong's principles on marketing segmentation that specify that market segments must be substantial, or large or profitable enough, to be served (2010). The three-cluster solution produced distinct profiles but only included large clusters and one small cluster, resembling *free time extremists* (n=78). Because of the large clusters, the researchers determined that the ability to understand the uniqueness of the market segments among the college students would be reduced. Thus, the three-factor solution was rejected.

Cluster Comparisons.

Cluster comparisons were made for several demographic variables and the perception of free time was found to be unrelated to socio-demographic factors (Table 3.3). The chi-square tests showed the four groups did not differ on the basis of gender (χ^2= 4.20, df = 3, p=.24), work status (χ^2= 1.56, df=3, p=.67), or relationship status (χ^2= 2.32, df=3, p=.51). Additionally, an ANOVA test to determine whether there were age differences was insignificant (F=1.28, df=3, p=.28).

Relationships among related leisure variables, perception of amount of free time and regular participation in a leisure activity were also compared among the perception groups (Table 3.3). There was no significant difference among the four perception groups in terms of their perception of the amount of free time they had (F=2.01, df=3, p=.11). A chi-square test comparing regular activity participation among the four perception groups was significant (χ^2=13.45, df=3, p=.004), suggesting that the groups differed in regular participation in a leisure activity. The proportion of those who did not participate in an activity on a regular basis was calculated. Eighteen percent (18%) of *strugglers* indicated that they had no regular participation in an activity while 16% of *easy-goers*, 11% of *extremists*, and 6% of *achievers* indicated no participation.

Finally, comparisons were made with respect to the psychological and identity based measures. The MANOVA analysis yielded significant differences in self-esteem, depression, identity commitment, and ruminative exploration among the identity clusters (Table 3.4). Regarding self-esteem, *strugglers* had the lowest scores, followed by *easy-goers* and *extremists*, and *achievers* respectively. Strugglers also reported the highest

levels of depression, followed by *extremists* and *easygoer*s, and *achievers* reported the lowest levels of depression. The mean depression level of the *strugglers* (Σ=15.42) approaches the cutoff for potential clinical levels of depression (Σ=16) (Lewinsohn, Seeley, Roberts, & Allen, 1997). *Achievers* and *extremists* reported the highest levels of identity commitment, followed by *easy-goers*, while *strugglers* had the lowest identity achievement. Unsurprisingly, *strugglers* also exhibited the highest levels of ruminative exploration.

Correlations between variables.

Correlations were examined to understand the relationships among the variables. For simplicity's sake, a description of those relationships will include the following: 1) significant relationships between variables across all four groups and 2) unique relationships among variables only found in single cluster groups. Table 3.5 shows a comprehensive listing of the correlations. The single correlation found across all four groups was the negative relationship between the perception of boredom during free time and self-esteem. The negative correlation was found to be the strongest for *extremists* (*r*=-.37), followed by *achievers* (*r*=-.33), *strugglers* (*r*=-.21), and *easy-goers* (*r*=-.16). There were several unique and significant relationships between the variables among the perception clusters. *Strugglers* showed unique differences from other perception groups in that their reports of boredom were negatively related to challenge. For *extremists*, the unique relationships among variables as compared to other perception clusters were that self-esteem was positively related to the desire for challenge free time, and negatively

Table 3.3: Perceptions of free time by perception cluster

	Perception of Free Time[1]				Related Leisure Variables		Demographic Characteristics			
	Awareness	Boredom	Challenge	Distress	Amount of Free Time	Regular Participation in Leisure Activity	Age	Gender[2]	Work Status[3]	Relation-ship Status[4]
Free-Time Easy-Goers (n=183)	5.44[a]	2.33[a]	3.77[a]	2.21[a]	3.85	Y= 152 N= 31	19.8	Fe= 97 M= 84	NW= 142 W= 38	S= 111 P= 69
Free Time Achievers (n=165)	5.95[b]	1.98[b]	5.19[b]	2.23[a]	4.15	Y= 154 N= 11	19.9	Fe= 87 M= 77	NW= 119 W= 43	S= 111 P= 52
Free-Time Strugglers (n=139)	4.07[c]	2.89[c]	4.62[c]	3.36[b]	3.94	Y= 111 N= 28	20.2	Fe= 65 M= 73	NW= 107 W= 31	S= 91 P= 43
Free-Time Extremists (n=78)	5.65[d]	2.54[d]	4.64[c]	5.06[c]	4.37	Y= 69 N= 9	20.6	Fe= 32 M= 45	NW= 60 W= 17	S= 53 P= 24
	F=173.47	F=39.58	F=132.57	F=240.47	F=2.01	χ^2=13.45	F=1.28	χ^2= 4.20	χ^2= 1.56	χ^2= 2.32
	p<.001	p<.001	p<.001	p<.001	p=.11	p=.004	p=.28	p=.24	p= .67	p=.51

[1]Measured on a 7-point Likert-type scale where higher values indicate higher experience of the respective dimension.

[2] Fe=female, M=male

[3] NW=not working, W= not working

[4] S=single, P=partnered

Reading down the column, means with different superscripts are not significantly different (p<.05).

Table 3.4: Well-being and identity scores by perception cluster

	Self-Esteem	Depression	Identity Commitment	Ruminative Exploration
Free-time Strugglers (n=139)	20.87[a]	15.42[a]	3.44[a]	3.03[a]
Free-Time Extremists (n=78)	23.28[b]	12.35[b]	3.94[b]	2.74[bc]
Free-Time Easy-Goers (n=183)	22.48[b]	11.80[b]	3.69[c]	2.78[b]
Free Time Achievers (n=165)	24.81[c]	9.41[c]	3.95[b]	2.51[c]
	F=18.04	F=13.02	F=15.99	F=8.13
	$p<.001$	$p<.001$	$p<.001$	$p<.001$

Reading down the column, means with different superscripts are significantly different ($p<.05$).

Table 3.5: Correlations among study variables by perception group

	Awareness	Boredom	Challenge	Distress	SE	CESD	Identity Commitment	Ruminative Exploration
Free Time Strugglers								
Awareness	1							
Boredom	-.21*	1						
Challenge	.08	-.18*	1					
Distress	-.01	.55**	-.04	1				
SE	.17*	-.21*	.06	-.10	1			
CESD	-.20*	.21*	.01	.09	-.67**	1		
ID Commitment	-.06	.04	-.17	-.06	.40**	-.43**	1	
Ruminative Exp.	.04	.14	.15	-.03	-.22*	.21*	-.46**	1
Free Time Extremists								
Awareness	1							
Boredom	-.20	1						
Challenge	.46**	-.28	1					
Distress	-.24*	.14	-.13	1				
SE	.46**	-.37**	.41**	-.23*	1			
CESD	-.43**	.32**	-.39**	.16	-.73**	1		
ID Commitment	.19	-.23*	.10	-.18	.40**	-.31**	1	
Ruminative Exp.	-.16	.16	-.23*	.18	-.27*	.16	-.51**	1
Free Time Easy-Goers								
Awareness	1							
Boredom	-.15*	1						
Challenge	.25**	.14	1					
Distress	.18*	.31**	.14	1				
SE	.19**	-.16*	.14	-.07	1			
CESD	-.23**	.05	-.16*	-.05	-.67**	1		
ID Commitment	.18*	-.11	.08	.00	.34**	-.30**	1	
Ruminative Exp.	-.20**	.17*	.03	.11	-.34**	.34**	-.70**	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Free Time Achievers								
	Awareness	Boredom	Challenge	Distress	SE	CESD	Identity Commitment	Ruminative Exploration
Awareness	1							
Boredom	-.27**	1						
Challenge	.12	-.14	1					
Distress	.09	.21**	.02	1				
SE	.10	-.33**	.13	-.10	1			
CESD	-.12	.24**	-.09	-.04	-.61**	1		
ID Commitment	.07	-.15*	.07	.11	-.40**	-.21**	1	
Ruminative Exp.	-.13	.18*	-.18*	-.04	-.33**	.29**	-.49**	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

related to the feelings of distress during free time. Additionally, for *extremists*, identity commitment was negatively related to perceptions of boredom during free time. The unique relationships existing among variables for the *easy-goer* group included the positive relationship between the awareness of things to do during free time and identity commitment, the negative relationship of awareness to ruminative exploration, and also the positive relationship between perception of boredom during free time and ruminative exploration. For *achievers*, the only unique correlation was the positive relationship between perceptions of boredom during free time and ruminative exploration.

Discussion

In this study, we examined the variation of well-being and identity development across segments of emerging adults based on their perception of free time. We chose the perception of free time as our independent variable as freedom is an inherent part of emerging adulthood but has received little attention in the leisure and developmental literature with few exceptions (e.g., Barnett, 2005). Four perception clusters were identified and the free-time perception variables that differentiated among the between groups of emerging adults were awareness and boredom. It appears that both cognitive perceptions (i.e., awareness) and affective perceptions (e.g., boredom) are important in understanding how free time is perceived among emerging adults. For all groups, boredom was significantly and negatively correlated with levels of self-esteem. Thus, according to this research, using targeted health messages and programming to improve self-esteem may help reduce boredom among all emerging adults. Self-esteem was found to be a protective factor against depression among emerging adults, and here it appears

that it may also protect against boredom during free time (Costello et al., 2008; Orth et al., 2008). Conversely, it may be possible that by reducing boredom, there may be direct or indirect positive effects on self-esteem.

The majority of the sample (n=183, 32%) was labeled as *easy-goers* in that they had a laissez-faire approach to their free time. On average, they had a strong awareness of things to do with their free time but did not express a strong desire to challenge themselves during their free time. Perhaps individuals within this group desire to spend their free time relaxing, or do not feel like they have enough free time to engage in forms of leisure that are challenging. Although there was no significant difference among the profiles regarding their perception of the amount of free time, the *easygoers* had the lowest mean, with the strong possibility that individuals in this group may experience time constraints as opposed to a lack of awareness. The *easy-goers* perceived low levels of boredom and distress during their free time. In comparing the mental health and identity development of the *easy-goer* group to others, this group is fairly moderate on all variables: moderate to high self-esteem, moderate to low levels of depression, and moderate levels of identity development and ruminative exploration. It is also possible that the *easygoers* may already spend their time in identity-relevant and health-boosting activities through other academic and social activities. However, another implication is while these individuals are "doing alright", they may be missing out on engaging in activities that may potentially boost mental health and identity formation through leisure activities during free time. In fact, 16% of the *easy-goers* reported no regular participation in leisure activities. Thus, potential marketing may target this group of

emerging adults by not only communicating the importance of regular participation in a leisure activity but also activities that are challenging as to increase opportunities for identity formation and positive well-being. As seen in the unique correlations, this group may also benefit from marketing that increases awareness of the importance of free time and of things to do with their free time since the awareness variable is positively related to identity commitment, and negatively related to ruminative exploration.

The next largest portion of the sample, the *achievers*, consisted of approximately 29% of the sample (n=165). This group was labeled as such because they took a very balanced approach to free time. On average, they had the highest awareness of things to do within the community, enjoyed challenge, and experienced the least amounts of boredom and the amount of distress during free time. When compared to other groups, the *achievers* showed a unique and positive relationship between boredom and ruminative exploration. Regarding mental health and identity formation, this group of individuals experiences the highest levels of self-esteem, the lowest levels of depression, high levels of identity commitment, and low-levels of ruminative exploration. Only 6% of the *achievers* indicated that they did not regularly participate in a leisure activity. Research by Berzonsky (1989) and Côté and Schwartz (2002) suggested identity commitment, identity capital (e.g., self-esteem), and information-seeking behavior are all interrelated. As such, the *achiever* group demonstrates the benefits of these identity-related attributes in terms of their perceptions of free time. From a marketing standpoint, this group is the ideal informed market on free time and steady streams of marketing that

reduces the perception of boredom during free time may continue to support self-esteem and mitigate rumination exploration.

The third cluster found was labeled as the *strugglers* (n=139; 25%). *Strugglers*, on average, had the lowest level of awareness of how to spend their free time, the highest levels of boredom, enjoyed moderate levels of challenge during their free time, and experienced moderate levels of distress when they had free time. *Strugglers* exhibited unique relationships among variables in that there was a negative relationship between boredom and challenge. Unsurprisingly, the strugglers have the most concerning levels of mental health and identity formation. With the lowest levels of self-esteem, depression that nears the cutoff for clinical levels of depression (Lewinsohn et al., 1997), lowest levels of identity commitment, and the highest levels of ruminative exploration, this group of emerging adults should receive the most targeted marketing in terms of healthy use of free time. As 18% of the *strugglers* reported having no regular participation in a leisure activity, it is essential to appeal to the unique qualities of the group. Marketing that appeals to challenge during free time might reduce boredom among the *strugglers*, and self-esteem may be indirectly increased as boredom and self-esteem were negatively related for all perception groups. Moreover, because of the high levels of ruminative exploration, this group may benefit from interventions focusing on building awareness and self-knowledge in that the ruminative exploration often is associated with unproductive patterns of exploration and the search for the perfect choice (Luckyx et al., 2008; Ritchie et al., 2013; Trapnell & Campbell, 1999). Considering the current levels of mental health and identity formation, this group of emerging adults needs the most

targeted form of health marketing, programming, and interventions which might focus on the cognitive and affective perceptions of free time.

Finally, the smallest yielded cluster was that of the *extremists* (n=78, 14%). The *extremists* are highly aware of how to spend their free time, experience moderate to high levels of boredom, enjoy moderate to high levels of challenge, and have the highest levels of distress when they experience free time. The *extremists* have unique relationships among the variables in that their levels of self-esteem positively correlate with the level of challenge they seek during free time, and negatively correlate with the distress they feel when they have no plans during free time. In this case, a busy and challenged *extremist* appears to be a more self-assured *extremist*; only 11% of *extremists* reported not regularly participating in a leisure activity. The corresponding levels of mental health and identity formation are high levels of self-esteem, moderate levels of depression, and moderate to high levels of identity commitment and ruminative exploration. Marketing for this small but potentially vulnerable group should target healthy ways to challenge this group, and find ways to best mediate the negative feelings they may experience if they have no plans. Table 3.6 summarizes suggestions for the four free-time perception groups.

The present research takes an applied approach to understanding current levels of mental health and identity formation as a function of perception of free time in order to better inform those working in health and student affairs settings on college campuses. As Havitz et al. (2013) remarked, segmented groups "are especially useful for the pragmatic

Table 3.6: Summary of Recommendations for Health Marketing and Programming

Free Time Status	Recommendations for Health Marketing and Programming
Free Time EasyGoers	• Provide interventions and leisure education programming that encourages self-discovery and challenge during free time (e.g., leisure preferences) • Provide time management instruction to boost perception of adequate amounts of free time (e.g., time diaries) • Encourage use of free time as an avenue for identity development
Free Time Achievers	• Help individuals maintain healthy use of free-time
Free Time Strugglers	• Provide health interventions that boost knowledge of resources and decision making skills (e.g., how to navigate constraints) • Provide health and recreation activities that help manage distress and depression • Encourage use of free time as an avenue for identity development
Free Time Extremists	• Provide health and recreation activities that help manage distress and depression • Capitalize on desire for challenge in health-supporting activities

clarity they bring to understanding differences and similarities among specific groups of people as opposed to developing generalizations across an entire sample or with respect to understanding relationships between variables" (p. 58). Still, while segmenting emerging adults on their perceptions of free time provides practical marketing solutions, the findings do not provide evidence of causality and should be interpreted as relationships. Additionally, this research strictly asked for self-reported perceptions of free time as opposed to actual use of free time. Future research may replace perceptions with self-report behavior or other observational data. Finally, despite being used in several leisure-based studies, the LEBYA has only been validated by establishing a

nomological network in which the observed constructs (e.g., awareness and boredom) are compared to each other and evaluated based on how they align with theoretical reasoning. The findings of this research should be considered cautiously, and future psychometric work on the LEBYA should be pursued.

The literature suggests that emerging adulthood is a time of great freedom; however little research has explored the concept of free time among emerging adults. The present findings provide evidence that one's perception of free time should be a focus of marketing and programming in efforts both in practice and in research. It appears that deficiencies associated with perceptions of free time, such as the lack of awareness of opportunities and increased levels of boredom, may be potential correlates of mental health issues that have recently been prominent on college campuses. Moreover, one's approach to free time may reflect and affect identity formation that is a developmental task of emerging adulthood. The present findings provide support for further research on the interrelationships between free time, mental health, and identity formation.

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CHAPTER FOUR

Mediating Analyses of Perception of Free Time, Self-Esteem and Depression Among Emerging Adults with Distinctive Identity Statuses

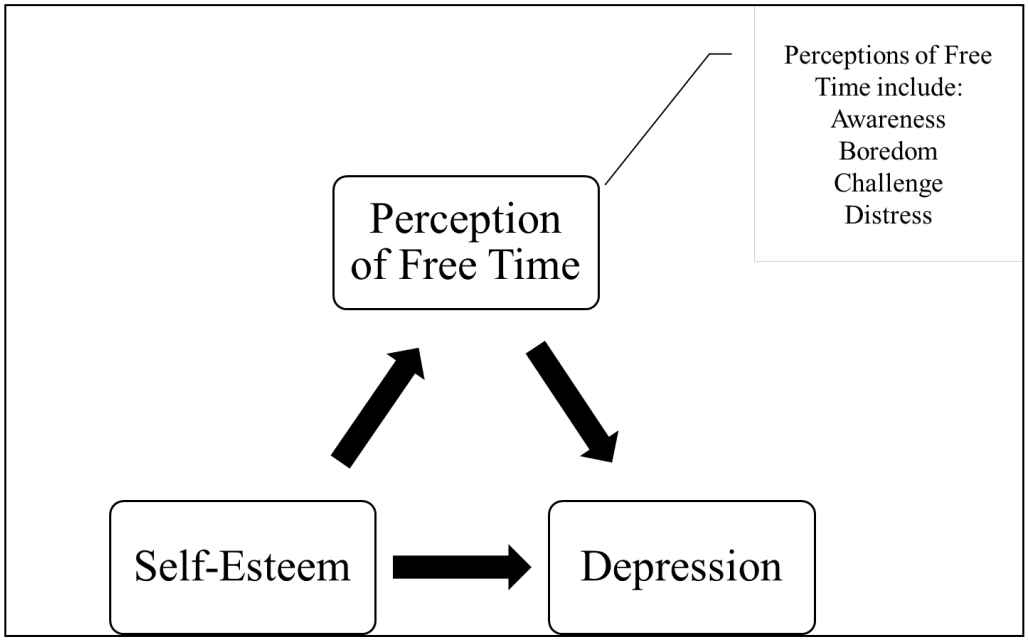
Introduction

Research regarding leisure's role in major life events and well-being has mostly focused on middle aged and older adults involved in the major transitory life events of illness, marriage, divorce, widowed, retirement, unemployment and employment (Iwasaki & Smale, 1998). However, the understanding of how an individual's leisure changes from adolescence into young adulthood has been largely neglected (Raymore, Barber, Eccles, & Godbey, 1995; Shinew & Parry, 2004). According to Kleiber (1999), during the transition from adolescence to adulthood, an individual's narrative about leisure might be suspended or altered, calling for a restructuring of leisure beliefs, values, sense of self and goals in ways that make sense in the transition. Moreover, leisure participation may be affected by the transition, including the loss of leisure identity, leisure abilities and opportunities, and leisure relationships. Thus, Raymore and colleagues (1999; 2000) suggested that further exploration of the relationship between leisure behavior and the major life transition experienced between adolescence and adulthood be carried out. With few exceptions (e.g., Blanco & Barnett, 2014), the emerging adult population has not been studied with the uniqueness of the developmental period in mind but rather as samples of convenience. Consequently, our understanding of the relationship between lifespan development and leisure participation among emerging adults is incomplete.

Emerging adulthood is the transition from adolescence into adulthood and is typically associated with individuals in the 18-25 age range (Arnett, 2004). As emerging adults move away from parents and navigate the unstructured setting of college, they take on the major developmental task of identity development in the realms of work, worldview, and love (Arnett, 2004; Erikson 1968, 1980). The process of identity formation involves periods of exploration of and commitment to identity options (Marcia, 1966; 1980). Because some emerging adults possess protective factors, existing personal characteristics, and skill sets from adolescence (e.g., agency, information-seeking behavior), they are more able to navigate the freedom of emerging adulthood. Others may struggle with the freedom of emerging adulthood and experience rumination, brooding, and low-levels of well-being. As such, levels of well-being (e.g., self-esteem, depression) may coincide with the individual's respective stage of identity development, and may vary greatly between individuals depending on their respective status of identity formation.

For emerging adults, this developmental period is not only a time of *freedom from* supervision and responsibilities (e.g., full-time work), but also *freedom to* explore and create one's self anew. Although emerging adults experience great amounts of unstructured and unsupervised independence, one component of freedom, free time, has been minimally studied in terms of its interrelationship with variables of well-being among emerging adults. Four dimensions experienced during free time are awareness (e.g., knowledge of how to spend one's free time), boredom (e.g., experiencing dullness during one's free time), challenge (e.g., the desire to push one's limits during free), and

Figure 4.1: Mediating effect of perception of free time on measures of well-being



distress (e.g., anxiety felt during one's free time) (Barnett, 2005). As Kleiber (1999) stated, the emerging adulthood period may fundamentally change how leisure is experienced due to the natural progression of the lifespan. This research takes a closer look at the perception of free time, a common interpretation of leisure, among emerging adults and its mediating effect on well-being (Figure 4.1). Further, the assumption that every individual within the developmental phase of emerging adulthood is identical in the identity formation process would be imprudent. Thus, this research also sought to understand the changing relationship between leisure-related variables and well-being among groups of emerging adults from different identity statuses. The research questions are as follow:

1. Does the perception of leisure free-time mediate the relationship between self-esteem and depression among emerging adults?

2. What are the differences in self-esteem and depression among differing groups of emerging adults?
3. Assuming mediation exists for the entire sample, for which identity cluster(s) does the perception of free-time mediate the relationship between self-esteem and depression?

Literature Review

Identity during Emerging Adulthood

Identity can be manifested in domain-specific and global ways (Goossens, 2001). While global identity refers to one's overall sense of self, domain-specific identity refers to identities that an individual shows to the world and uses to distinguish him or herself from others (McAdams & Cox, 2010; Schwartz, 2001). Much of the research in the leisure literature has focused on domain-specific identities, including ethnic identity, gender identity, leisure identity and their various relationships with leisure behavior. However, with few exceptions (e.g., Duerden et al., 2009; Shaw, Kleiber, & Caldwell, 1995), there has been a paucity in the leisure research on the subject of the relationship between leisure-related correlates and global psychosocial identity.

In order to understand psychosocial identity, developmental psychologists have steadily progressed from Erikson's *identity confusion vs. identity synthesis* crisis to more intricate identity models. The most recent model from Luyckx et al. (2008) breaks down the facets of exploration and commitment into five dimensions in order to better understand the identity formation process. *Commitment making* refers to the degree to which an individual has made choices concerning his or her identity (Luyckx et al.,

2008). *Identification with commitment* is a measure of one's certainty, happiness, and internalization of identity choices (Luyckx et al., 2006, Luyckx et al., 2008). *Exploration in breadth* describes when an individual is actively investigating different identity alternatives and information before identity commitments are made (Luyckx et al., 2006). *Exploration in depth* involves examining existing commitments in order to ascertain the degree to which they align with personal goals, values and beliefs. Researchers have also noted that exploration can also be maladaptive in that an individual may dwell on identity issues without taking action, thereby resulting in brooding and anxiety (Burwell & Shirk, 2007; Trapnell & Campbell, 1999). *Ruminative exploration* involves an unproductive pattern of exploration that is filled with repetitive self-doubt and the search for the unattainable goal of the perfect choice (Luckyx et al., 2008; Ritchie et al., 2013; Trapnell & Campbell, 1999). The dimensional approach to understanding identity formation and commitment allows researchers to not only investigate the influence of those individual dimensions (variable-centered approach), but can also be used to understand how those dimensions work together to form identity statuses through a person-centered approach (e.g., Luyckx, Schwartz, Goossens, Soenens, & Beyers, 2008a). In other words, based on the findings from Luyckx and colleagues (2005; 2008b) and Schwartz et al. (2011), individuals can be clustered into identity statuses (e.g., *achievement*, *foreclosure*) based on their reported levels of individual identity dimensions (e.g., identification with commitment, exploration in depth).

Using the results from Luyckx et al. (2008), the identity statuses were found to be related to the identity dimensions in the following manners (Table 4.1). Individuals

clustered into the *achievement* identity status score high on both commitment dimensions, moderately high to high on exploration in breadth and depth and low on ruminative exploration. Those clustered in *foreclosure* status score moderately high to high on both commitment dimensions, moderately low to very low on exploration in breadth and ruminative exploration, and moderately low to intermediate on exploration in depth. Individuals clustered into *ruminative moratorium* and/or *searching moratorium* score moderately low to intermediate levels on both commitment dimensions and high to very high on all three exploration dimensions. Those grouped into *carefree diffusion* score moderately low to low on both commitment dimensions, low to very low on exploration in breadth and exploration in depth, and intermediate on the ruminative exploration dimension. Individuals in the *diffused diffusion* identity status score very low on both commitment dimensions, intermediate on exploration in depth and exploration in breadth, and high to very high on ruminative exploration. Finally, those grouped individuals who report intermediate scores on all dimensions are categorized into an *undifferentiated* status. These statuses have been consistent across several studies, including Luyckx et al. (2008) and Schwartz et al. (2011).

Impact of Identity on Leisure-Related Knowledge and Behavior

Other identity-related correlates that might affect perception of free time among emerging adults were found among the aforementioned identity statuses. From a self-knowledge perspective, individuals in the *achievement* and *moratorium* statuses have

Table 4.1: Expected identity status/identity dimension relationships

Identity Status	Achievement	Foreclosure	Ruminative Moratorium[1] or Searching Moratorium[2]	Carefree Diffusion or Alienated Diffusion	Diffused Diffusion	Undifferentiated
Identity Dimension						
Identification with Commitment	High	High	Low to moderate	Low	Low	Moderate
Commitment Making	High	High	Low to moderate	Low	Low	Moderate
Exploration in Breadth	High	Low to moderate	High	Low to moderate	Low to Moderate	Moderate
Exploration in Depth	High	Low	Moderate to High	Low to moderate	Low to Moderate	Moderate
Ruminative Exploration	Low	Low	High	Low to moderate	Moderate to high	Moderate

[1] Luyckx et al. 2008

[2] Schwartz et al. 2011

been found to have been found to be open to self-exploration, possess identity capital (e.g., self-esteem, agency), seek out relevant information, and make decisions concerning identity once they process and evaluate the information. Those with a *foreclosed* status who often make commitments without exploration rely on the normative style of decision making in that they rely on authority, parents, and peers for identity-related information. Those who lack firm commitments, as represented by the *diffusion* statuses, typically avoid dealing with problems or decisions and procrastinate until extrinsically motivated to take a course of action (Berzonsky, 1989, 1990; Berzonsky & Adams, 1999; Berzonsky & Cieciuch , 2014; Berzonsky & Kuk, 2000; Berzonsky, Soenens, Luyckx, Smits, Papini, & Goossens, 2013; Schwartz, Mullis, Waterman, & Dunham, 2000). Consequently, emerging adults may have different ways of collecting and processing information regarding what to do with their free time.

From a self-expression perspective, individuals also report significantly different levels of personal expressiveness based on their identity status. Personal expressiveness occurs when a person participates in identity-related activities that mesh with the potentialities of the individual (Schwartz et al., 2000). According to Kleiber (1999), personal expressiveness manifested through leisure becomes a key factor in the adjustment process. Those emerging adults in the *achievement* status have the highest levels of personal expressiveness, followed by *foreclosed* and *moratorium*, and lastly, those in the *diffusion* status have the lowest levels of personal expressiveness (Schwartz et al., 2000).

Well-being among identity clusters

The identity status approach has also been used to understand positive and negative functioning among emerging adults. Positive functioning includes positive self-evaluation (e.g., self-esteem), a positive assessment of how one's life is unfolding (e.g., life satisfaction), and appraisals of growth and purpose (e.g., psychological well-being, eudaimonic well-being, and meaning in life) (Schwartz et al., 2011). Schwartz et al. (2011) found that individuals whose identities align with the *achievement* and *foreclosure* identity clusters have the highest functioning, those in *searching moratorium* and *undifferentiated* status demonstrate moderate levels of functioning, and those in the *diffused diffusion* and *carefree diffusion* statuses demonstrate the lowest levels of positive functioning. Moreover, positive functioning, as measured by psychological well-being, subjective well-being and eudaimonic well-being, was found to be protective against

health-compromising behaviors for college-attending emerging adults (Schwartz et al., 2011).

Negative functioning includes internalizing factors (e.g., depression and anxiety) and externalizing factors (e.g., physical aggression). Schwartz et al. (2010) reported that levels of depression significantly differed among emerging adults from the identity status clusters, with those from *foreclosed* statuses having the lowest levels of depression, followed by those in *achievement, carefree diffusion*, *diffused diffusion*, and *searching moratorium statuses*, respectively. Those in *foreclosure* typically have lower levels of negative functioning compared to those in identity *achievement* due to a lack of exploration and reconsideration of identity options that is inherent in the identity *achievement* status.

Method

Sample

The data were collected from 604 college-attending emerging adults at a midsize southeastern university in Fall 2014. College-attending emerging adults in a range of classes at a midsize southeastern university were invited to participate in the study during their respective class sessions during the fall of 2014. Surveys were completed immediately after the invitation in the classroom; survey completion took no longer than 20 minutes. Classes surveyed included the disciplines of health science, education, leisure studies, chemistry, and sociology.

Measures

Perception of Free Time.

Perception of free time was measured using the Leisure Experiences Battery (LEBA; LEBYA) (Caldwell et al., 1992; Barnett, 2005). The scale has been used by the aforementioned references with adolescent and emerging adult populations to measure qualitative dimensions of the leisure experience. The 19-item scale utilizes a seven-point Likert response scale (ranging from "strongly disagree" to "strongly agree") and consists of four subscales: *awareness* (e.g., "In the community where I live I am aware of exciting things to do in my free time"), *boredom* (e.g., "My friends and I often talk about how bored we are") *challenge* (e.g., "I like free time activities that are a little beyond my ability"), and distress (e.g., "The worst feeling I know is when I have free time and don't have anything planned"). Because previous research confirmed the independence of the subscales (awareness, boredom, challenge, and distress) (Barnett, 2011), the four perceptions of leisure were treated as such in this study. Consequently, there is no interpretable summative score for this scale. The validity of the four subscales has been established in previous work by comparing theoretical relationships among the measures (i.e., nomological network) (Caldwell et al, 1992; Barnett, 2005; Barnett, 2011).

Following the procedures established in previous studies using this battery (Barnett, 2005), items that degraded internal consistency were removed; one item was removed from each subscale. The resulting scale reliabilities following item removal were similar to those found with an emerging adult sample (Barnett, 2005) with the exception of boredom as the reliability for boredom was lower than found in previous

research. The final reliabilities are as follow: awareness (α= 0.73), boredom (α= 0.66), challenge (α= 0.72), and distress (α= 0.73). The extent to which the perception of free time is present is represented by a mean score that represents the average of all the items for the respective subscale; higher means represent higher perception of the qualitative dimension during free time.

***Personal identity*.**

The Dimensions of Identity Development (DIDS) (Luyckx et al., 2008) was used to assess five dimensions of identity development. The 25-item scale includes 5 questions for each subscale and includes a five-point Likert type response format, from strongly disagree to strongly agree. Sample items from the DIDS include "I am considering a number of different lifestyles that might suit me" (exploration in breadth), "I think about whether the aims I already have for life really suit me" (exploration in depth), "I have decided on the direction I am going to follow in my life" (commitment making), "My plans for the future match with my true interests and values" (identification with commitment), and "I keep looking for the direction I want to take in my life" (ruminative exploration).

Construct validity of the identity scale was found in previous work by investigating the correlations among the different identity dimensions and comparing the associations found among the dimensions to findings from other research (Luyckx et al., 2008). Validity was also supported by the findings from Schwartz et al (2011) as the study replicated the clusters using empirical, rather than a-priori, classification methods. Furthermore, concurrent validity was established by comparing the identity status clusters

derived from the DIDS data to established measures of Erikson's concepts of identity synthesis and confusion (Schwartz et al., 2011). The findings were consistent with identity theory from Erikson and neo-Eriksonian scholars in that those in the *achievement* and *foreclosed* statuses demonstrated higher levels of identity synthesis than their *carefree diffusion* and *diffused diffusion* counterparts, whereas those in *carefree diffusion* and *diffused diffusion* possessed higher levels of identity confusion compared to individuals in *achievement* and *foreclosure* statuses. The reliabilities were acceptable: exploration in breadth (α=0.85), exploration in depth (α=0.69), commitment making (α=0.93), identification with commitment (α=0.89), and ruminative exploration (α=0.86).

Self-esteem.

Self-esteem was assessed using the 10-item (α=.89) Rosenberg Self-Esteem Scale (Rosenberg, 1965). The responses range from 1 (strongly disagree) to 4 (strongly agree) . Sample items from the scale include "I feel that I have a number of good qualities" and "I feel I do not have much to be proud of." A composite score was calculated by summing the scores of the items, with the maximum possible score being 30.

Depressive symptoms.

Depressive symptoms were assessed using the 20-item (α=.89) Center for Epidemiological Studies Depression scale (CES-D; Radloff, 1977). The scale includes four-point Likert type responses from 1 (rarely) to 4 (most of the time) and a composite score is created by summing the items. The maximum possible score is 60. Sample items from this scale include "I was bothered by things that usually don't bother me" and "I felt sad."

Data Analysis and Results

Following data inspection for univariate and multivariate outliers and data cleaning, a sample of 565 surveys was retained. The mean age of the sample was 20.07, half were female, about three-quarters were not working during the school year, and the majority were underclassmen. See Table 4.2 for a detailed breakdown of the participants' characteristics. The descriptive statistics and correlation matrix for the variables in the present study are included in Table 4.3.

Research Question 1

The first research question sought to understand if the four perceptions of free time uniquely mediate the relationship between self-esteem and depression among the current sample of emerging adults. Mediation analyses were conducted in IBM SPSS Statistics Version 22 using Preacher and Hayes' bootstrapping method to ascertain the extent to which the four different perceptions of free time (e.g., awareness, boredom, challenge, distress) individually mediate the relationship between self-esteem and depression for the entire sample. Confidence intervals (CI) and coefficients with 95% confidence were calculated; confidence intervals that do not include the zero indicate significant mediation. Leisure awareness partially mediated the relationship between self-esteem and depression (Table 4.4; [CI: -.11, -.02]). All other mediation analyses were insignificant according to the confidence intervals, although other individual paths were significant. For example, self-esteem was related to each of the perceptions of free time: leisure awareness (β=.07), boredom (β=-.05), challenge (β=-.04), and distress (β=-.03).

Thus, as self-esteem increases, levels of awareness and challenge increase while boredom and distress decrease among this sample of emerging adults.

Research Question 2

Because a significant effect was found across all emerging adults regarding leisure awareness' mediation of the relationship between self-esteem and well-being, a follow-up analysis of the mediation model was conducted to understand if emerging adults from different identity statuses might exhibit various levels of free time awareness and the impact of that awareness on well-being (found later in research question three). Before the mediation analyses were conducted, the second research question regarding the level of self-esteem and depression among emerging adults of distinctive identity statuses needed to be answered. Thus, identity clusters were created using the items data from the Dimensions of Identity Development Scale (DIDS; Luyckx et al., 2008). Hierarchical cluster analyses, using Ward's method and Euclidian squared distance, were used to identify the best cluster solution. As conducted in previous research (i.e., Schwartz et al., 2010), a range of cluster solutions was examined to find the solution that best fit the data. The dendrogram and agglomeration index indicated a five- or seven-cluster solution, with the five-cluster solution mirroring the solutions found by previous researchers (Schwartz et al., 2010). The clusters were named *ruminative moratorium* (n=173), *carefree diffusion* (n=138), *achievement* (n=136), *diffused diffusion* (n=84), and *foreclosure* (n=34).

The aforementioned identity clusters were compared for differences on measures of self-esteem and depression (Table 4.5). Using Scheffe tests for unequal group sizes,

Table 4.2: Selected demographic characteristics of study participants

Sample Characteristics	N	%
Total	565	100.0%
Age		
Mean (SD)	20.07	2.97
Gender		
Female	281	49.7%
Male	297	49.4%
Missing	5	0.9%
Other	2	0.7%
Missing	7	1.2%
Employment Status		
Not working	428	75.8%
Working	129	22.8%
Missing	8	1.4%
Class Year		
Freshmen	251	44.4%
Sophomore	197	34.9%
Junior	67	11.9%
Senior	44	7.8%
Other	1	0.2%
Missing	5	0.9%

Table 4.3: Correlations among study variables

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. Exploration in Depth	3.67	.61	1	.323**	.332**	.350**	.016	.127**	-.105*	.081	.034	.128**	-.084*
2. Exploration in Breadth	3.82	.69		1	-.075	.028	.262**	.081	-.026	.202**	.016	.097*	-.028
3. Commitment Making	3.72	.86			1	.697**	-.594**	.221**	-.180**	.116**	.013	.241**	-.196**
4. Identification with Commitment	3.74	.71				1	-.564**	.288**	-.230**	.131**	-.006	.426**	-.352**
5. Ruminative Exploration	2.76	.95					1	-.225**	.226**	-.093*	.090*	-.335**	.294**
6. Leisure Awareness	5.29	1.04						1	-.398**	.185**	-.115**	.329**	-.323**
7. Leisure Boredom	2.39	.82							1	-.140**	.397**	-.326**	.273**
8. Leisure Challenge	4.51	.88								1	.081	.222**	-.151**
9. Leisure Distress	2.89	1.32									1	-.125**	.108*
10. Self-Esteem	22.88	4.95										1	-.694**
11. Depression	12.07	8.64											1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 4.4: Perception of free time as a mediator the relationship between self-esteem and depression

Mediator	Self-Esteem to Mediator	Mediator to Depression	Original Direct	Mediated Direct	Confidence Interval
Awareness	.07***	-.88***	-1.21***	-.1.15***	(-.11, -.02)
Boredom	-.05***	.55	-1.21***	-1.18***	(-.08, .01)
Challenge	.04***	.03	-1.21***	-1.21***	(-.03, .02)
Distress	-.03**	.14	-1.21***	-1.21***	(-.03, .01)

Table 4.5: Self-esteem and depressive Symptoms among identity clusters

	Achievement (1)	Foreclosed (2)	Ruminative Moratorium (3)	Diffused Diffusion (4)	Carefree Diffusion (5)	Significance Test	Post-hoc Tests
Self-Esteem	24.53	26.23	22.46	20.65	22.29	F=13.89 *p<.001*	1, 2 > 3, 4, 5
Depression	9.89	8.76	12.95	15.42	11.90	F=7.38 *p<.001*	1, 2 < 4; 1 < 3

Table 4.6: Leisure awareness as a mediator by identity cluster

Identity Cluster	Independent Variable	Dependent Variable	IV to Mediator	Mediator to DV	Original Direct	Mediated Direct	Confidence Interval
Achievement	Self-Esteem	Depression	.06**	-.38	-1.14***	-1.11***	(-.10, -.03)
Foreclosed	Self-Esteem	Depression	-.03	-1.29	-1.00***	-1.03***	(-.04, .23)
Ruminative Moratorium	Self-Esteem	Depression	.06**	-.32	-1.20***	-1.18***	(-.09, 04)
Diffused Diffusion	Self-Esteem	Depression	.08**	-3.17**	-1.41***	-1.17***	(-.49, -.07)
Carefree Diffusion	Self-Esteem	Depression	.07***	-.53	-1.18***	-1.15***	(-.15, .03)

the multivariate test indicated that there were significant differences on measures of well-being among the identity clusters ($F=7.52$, $df = 8$, $p<.001$). Post-hoc tests indicated that the *achieved* and *foreclosed* statuses demonstrated higher levels of self-esteem compared to *ruminative moratorium*, *carefree diffusion*, and *diffused diffusion*. The *achieved* and *foreclosed* statuses had significantly lower levels of depressive symptoms compared to *diffused diffusion*. Additionally, the *achievement* status had lower depressive symptoms than the *ruminative moratorium* status. To conclude, the committed statuses of *achievement* and *foreclosure* are associated with higher levels of well-being.

Research Question 3

The third research questions sought to investigate for which specific identity status cluster(s) leisure awareness mediates the relationship between self-esteem and depression. This research question was refined throughout the course of the data analysis based on the findings from the first research question since boredom, challenge and awareness did not significantly mediate the relationship between self-esteem and depression among emerging adults. Because leisure awareness was found to mediate the relationship between self-esteem and depression among the entire sample, follow-up mediation analyses using the aforementioned bootstrapping procedure were conducted to determine whether perceptions of awareness mediated the relationship between self-esteem and depression for the different identity statuses (Table. 4.6). The perception of awareness during free time partially mediated the relationship between self-esteem and depression only for the *diffused diffusion* group [CI: -.49, -.07]. All other mediation analyses were insignificant. Individual paths within the models were significant for the

various clusters. Self-esteem was positively and significantly related to leisure awareness for the *diffused diffusion* (β=.08), *carefree diffusion* (β=.07), *ruminative moratorium* (β=.06), and *achievement* (β=.06) identity groups. The individual path relationship between self-esteem and leisure awareness was insignificant for the *foreclosed* status.

Discussion

In the current study, we examined the links between personal identity, mental health, and perception of free time. Specifically, we sought to understand the extent to which perception of free time mediates the relationship between self-esteem and depression. Self-esteem has often been identified as a protective factor against depression, particularly among emerging adults (Costello, Swendsen, Rose, & Dierker, 2008). Additionally, Orth & Robins (2013) supported the congruent idea that low self-esteem acts as risk factor for depressive symptoms, and suggested that interventions incorporate ways to boost self-esteem in order to reduce or possibly prevent the occurrence of depressive symptoms. This study verifies that self-esteem does indeed serve as a protective factor but also suggests that awareness of opportunities within one's community may help decrease depression. Therefore, interventions aimed at boosting self-esteem while decreasing depressive symptoms may incorporate basic leisure education skills regarding opportunities and resources within the community as this knowledge may help emerging adults feel more connected to the community in which they live.

We found that leisure awareness, or the knowledge of the importance of and the knowledge of ways in which to spend free time, mediates the relationship between self-

esteem and depression regardless of identity status. While the coefficients were small, they suggest that awareness of things to do within one's community is important to well-being in that this knowledge may boost self-esteem and/or combat depression. Conversely, self-esteem may be a precursor for leisure awareness to occur as Côté and Schwartz (2002) suggested that those with more agency may be more able to identify resources and navigate the freedom inherent in emerging adulthood. While causal effects cannot be determined with this study, it appears that as emerging adults continue to mobilize and move to new places for education, work, or other opportunities, knowledge of opportunities within the community may play a large role in how they successfully navigate the transition and their level of satisfaction with their current community.

The findings of the current study also highlight the importance of leisure awareness for one particular subset of emerging adults—the *diffused diffusion* identity cluster. As demonstrated in this study and others (Schwartz et al., 2010), *diffused diffusion* statuses often exhibit the poorest levels of psychosocial functioning (e.g., low self-esteem, high depressive symptoms). For this group of emerging adults, leisure awareness played a mediating role in the relationship between self-esteem and depression, suggesting that including leisure education elements that focus on building knowledge of things to do within the community within larger wellness or counseling efforts may benefit those in this particular identity status. Interventions that promote knowledge-based approaches to identity (Schwartz et al., 2005) show promise and deciphering the emerging adults' approach to information gathering and decision-making process about how to spend one's free time may be fruitful.

Despite the findings of the present study, several limitations do exist. First, despite being used in several leisure-based studies, the LEBYA has only been validated by establishing a nomological network in which the observed constructs (e.g., awareness and boredom) are compared to each other and evaluated based on how they align with theoretical reasoning. The findings of this research should be considered cautiously, and future psychometric work on the LEBYA should be pursued. Second, because of the cross-sectional research design, we cannot suggest any form of causality among the variables. Longitudinal examinations of the intersection of identity, well-being and leisure involvement might provide additional insight into the why and how of leisure's impact on identity development and well-being as individuals transition from adolescence through emerging adulthood and into adult roles. Additionally, contextual factors, such as peer influence, should also be considered in future studies. Third, two of the identity status clusters had fairly low counts, potentially influencing the results of this study. Therefore, the results of this study may not be generalizable to other populations. Fourth, this study consisted of college-attending emerging adults only. Future research should also explore the "forgotten half" (Halperin, 1998) or those emerging adults not in college as they may have different experiences during leisure that may impact their development.

In summary, the results of this study suggest that perception of free time, particularly awareness of things to do within the community, does play a role in the relationship between self-esteem and depression, although minimally. This study also provides evidence that those who are struggling in identity development may benefit most from additional resources on things to do within the community. The results found

here provide a starting point for further investigation into how emerging adults of different identity statuses experience free time and leisure pursuits.

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CHAPTER FIVE

Conclusion

This research acts as one of the first studies to investigate leisure-related variables from a psychosocial identity approach. The limited research on psychosocial identity to date has sought to understand leisure participation as a function of identity (Kleiber et al., 1995) and how identity formation can be influenced by leisure experiences (Duerden et al., 2009). However, no research has used psychosocial identity as a means to understand a basic component of the developmental phase of emerging adulthood: free time. The purpose of this chapter is to summarize the findings of each article and provide direction for future research.

Summary of Findings

Article One

Article One investigated the perception of free time among emerging adults from various psychosocial identity statuses. Significant differences were found among identity statuses in terms of the awareness of things to do within the community, the amount of boredom felt during free time, and the level of challenge sought during free time (Table 5.1). Those in committed identities (e.g., *achievement*, *foreclosure*) were generally more aware of things to do within their communities as opposed to *ruminative moratorium* and *diffused diffusion*. Those in the *diffused diffusion* status also experienced the greatest levels of boredom during free time. Additionally, the *achievement* status desired larger levels of challenge during free time when compared to the *carefree diffusion* status. These findings provide evidence that emerging adulthood, a developmental period, filled

with large amounts of unstructured and unsupervised time, may be a period where some individuals thrive and where others struggle merely because of how they perceive their free time. These findings imply that health and student affair organizations on college campuses should continue to promote activities in order to reduce boredom during free time, and encourage challenging oneself through healthy campus-based activities.

Table 5.1: Summary of findings for article one

	Perception of Free Time		
Identity Status	*Awareness*	*Boredom*	*Challenge*
Achievement	High	Low to moderate	High
Foreclosure	High	Low	High
Ruminative Moratorium	Low to moderate	Moderate	High
Diffused Diffusion	Low	High	Low
Carefree Diffusion	Low to moderate	Moderate	Low

Article Two

Article Two took a social marketing approach to understand how emerging adults clustered around perceptions of free time, and investigated each of the clusters' health and identity correlates (Table 5.2). Four clusters were found—*free time strugglers*, *free time extremists*, *free time easy-goers*, and *free time achievers*. Those in the *struggling* group experience the poorest levels of well-being, the lowest levels of identity commitment, and the highest levels of ruminative exploration, whereas those in the *achievers* group had the highest levels of well-being, were the most committed to their identity, and had the least ruminative exploration. The article provided the uniqueness correlations between study variables among the free time perception groups and discussed how those unique relationships can be utilized to develop health promotion programming and marketing.

Table 5.2: Summary of findings for article two

	Perception of Free Time				***Well-Being***		***Identity Development***	
Perception Group	*Awareness*	*Boredom*	*Challenge*	*Distress*	*Self-Esteem*	*Depressive Symptoms*	*Identity Commitment*	*Ruminative Exploration*
Free Time EasyGoers	Moderate to High	Moderate to Low	Low	Low	Moderate to Low	Moderate to Low	Moderate	Moderate
Free Time Achievers	High	Low	High	Low	High	Low	High	Low
Free Time Strugglers	Low	High	Moderate	Moderate	Low	High	Low	High
Free Time Extremists	Moderate to High	Moderate to High	Moderate	High	Moderate to High	Moderate to High	High	Moderate

Article Three

Article Three investigated the intervening effects of perceptions of leisure on the relationship between self-esteem and depression. Mental health on college campuses have been a topic of great concern due to the increasing rates of depression and the overscheduled counseling services on campus. An understanding of how emerging adults of different identity statuses perceive their free time may help target programming and marketing from informal health providers (e.g., recreation, student affairs). Leisure awareness was found to partially mediate the relationship between self-esteem and depression for all participants. Thus, leisure awareness may have a direct effect on depression, and may indirectly decrease depression rates by boosting self-esteem. Further, when using the identity clusters found in Article One, only individuals in *diffused diffusion* yielded a significant partial mediation. In conclusion, those in the *diffused diffusion* status may experience greater benefits (e.g., greater self-esteem, lower depressive symptoms) from increased leisure awareness. The incorporation of leisure education programming within traditional counseling services may be contribute to the betterment of mental health among emerging adults, particularly those in the *diffused diffusion* status.

Contributions to Research and Practice

Leisure and Recreation Field

The aforementioned findings provide suggestions for research and practice in the leisure field. First, the findings suggest that the internal attribute of identity development

plays a role in how free time is navigated among emerging adults. This finding adds to the recent investigation of other internal attributes of personality (Barnett, 2011; 2013), internal leisure beliefs (Watkins, 2013), and well-being (Blanco & Barnett, 2014) on the leisure experience. Second, although identity development is a major developmental task during emerging adulthood, one is likely to re-evaluate and negotiate identity processes throughout one's life. As such, global identity, or sense of self, should be considered by leisure scholars across the lifespan. For example, identity exploration and re-commitment may occur for individuals entering the middle of their lifespan (e.g., "midlife crisis") and the impact of the identity processes may be manifested through leisure attitudes and behaviors. Third, those sampling from the college-attending emerging adult population should consider the unique characteristics of emerging adults as compared to other life phases (e.g., adolescents, young adults). Emerging adults on college campuses are often convenient samples, but may not represent the attitudes and behaviors of those across the lifespan.

Developmental Psychology

The findings also contribute to developmental psychology literature in that the studies provide evidence that one's global identity, or overall sense of self, can influence how one navigates the freedom of emerging adulthood, namely free time. The aforementioned findings contribute to the growing body of literature to understand the developmental pathways of emerging adults, and the question as to whether leisure free-time plays an influential role in emerging adults' health and well-being. This research found that those who had "achieved" a healthy outlook on free time (i.e., high awareness,

low boredom, moderate to high desire for challenge, low levels of distress) were also more likely to report high levels of well-being. Moreover, this research found that those in *diffused diffusion*, the most vulnerable group in terms of well-being, were positively influenced by increases in leisure awareness. Thus, even small steps to provide information about opportunities of how to spend one's free time within the community may be advantageous for those most at risk. Further exploration into the efficacy of including leisure awareness elements into leisure education programs, wellness programs, and/or identity intervention programs should be carried out.

Health Promotion

This research also suggests that health promotion programming and marketing for emerging adults should instead be adapted for target segments (e.g., those most at risk for unhealthy behaviors). The most at-risk group of emerging adults (i.e., those in diffused diffusion) may benefit most from leisure education, as leisure awareness mediates the relationship between self-esteem and depression among this particular segment of emerging adults. Moreover, emerging adults from different identity statuses exhibit different approaches in gathering information. As such, different marketing techniques may need to be considered in order to reach different market segments.

Future Research

As with all research, the findings provide avenues for further research on the interrelationships among identity, leisure, and well-being. The remainder of this chapter will highlight the topics that were prevalent and/or related to understanding how identity

and leisure intersect. These topics include decision-making in leisure, leisure motivations, leisure self-efficacy and collective-efficacy, and narrative identity.

Decision Making Concerning Leisure

The differences in leisure awareness and boredom seen throughout the three studies may be explained in how the individual uses feedback from interactions with the environment to build a sense of self (Waterman, 1984). A consistently used approach to understanding identity as self-construction is through looking at a person's identity style (e.g., Berzonsky, 1989; 1990; Berzonsky & Cieciuch, 2014; Berzonsky, Soenens, Luyckx, Smits, Papini & Goossens, 2013). Identity styles focus on the how individuals make decisions and choices concerning their lives. Future research may explore how emerging adults make decisions about their leisure by exploring the three identity styles: informational style, normative style and diffuse-avoidant style.

Individuals in the *informational style* seek out relevant information and make decisions concerning identity once they process and evaluate the information (Berzonsky, 1989). These individuals are open to new information and examine and revise their identities when cognitive dissonance occurs (e.g., developing new leisure ambitions after thorough research, discussion and reflection) (Berzonsky, 1989; 1990). Individuals in the *normative style* may make decisions about their leisure based on conforming to normative standards set by parents, peers or other authority figures (Berzonsky, 1989). Individuals in the *diffuse-avoidant style* tend to avoid dealing with decisions about their leisure time and procrastinate until extrinsically motivated to take a course of action. When forced to

act these individuals often make context-specific adjustments rather engage in long-term changes about their leisure involvement (Berzonsky, 1994).

Leisure Motivations

As mentioned throughout this document, each identity status is associated with cognitive and affective characteristics that may differentiate how they pursue and experience leisure. While this research has looked at the perceptions of free time, more explicit research regarding motivations and behaviors may further explain the interrelationships between identity and actual leisure behavior. The exploration of how the identity clusters correlate with deriving internal and extrinsic rewards from leisure participation, social interaction, challenging oneself, developing skill, seeking new experiences, and actively engaging in leisure may further explain how psychosocial identity plays influences leisure behavior.

Leisure Self-efficacy and Leisure Collective Efficacy

It was evident that those with committed identities (e.g., *achievement*, *foreclosure*) possessed skill sets or environmental factors that allowed them to be more aware of things to do within the community when compared to the exploration statuses, particularly the *diffused* statuses. Future research should investigate these skills sets, such as agency and/or self-efficacy within a leisure context, and seek to understand how psychosocial identity development plays a role in leisure self-efficacy. Beyond individual self-efficacy, it would interesting to investigate collective efficacy of groups of friends, or individuals within social organizations, to understand the interrelationship between

collective efficacy and identity and its effect on leisure behavior. In other words, in what ways do groups of leisure companions and their collective efficacy affect the pursuit and quality of leisure? Also, what is the influence of collective efficacy on peer pressure and risky leisure behavior?

Leisure and Narrative Identity

A narrative approach to identity is the understanding of individuals through their stories of self where key features or characteristics found in individuals' narratives represent their self-development (e.g., McAdams, 1993; McLean & Pratt, 2006). The life story is important in that it is an "internalized and evolving narrative of the self that selectively reconstructs the past and anticipates the future in such a way as to provide a life with an overall sense of coherence and purpose" (McAdams et al., 2006, p.1372). Future research should focus on the importance of leisure events in emerging adults' narrative identity, specifically looking to understand how leisure involvement help emerging adults continue their narrative identity from their adolescence or if the transition for emerging adults is a time to change or reinvent oneself from high school to college through leisure participation.

Mixed Methods Research

This research was strictly quantitative and did not benefit from thick, rich description and context that qualitative research affords. Thus, a major recommendation to extend this research is the pursuit of mixed methods research. Mixed methods research combines the strengths of quantitative and qualitative research paradigms and their respective research methods in a single study to answer research questions (Johnson &

Onwuegbuzie, 2004). Moreover, mixed methods research partners with the pragmatic research philosophy in that it uses and integrates methods, perspectives and approaches in order to best answer the research question in terms of completeness, information and application (Johnson, Onwuegbuzie, & Turner, 2007; Johnson & Onwuegbuzie, 2004). It is with the integration of qualitative and quantitative methods that researchers may achieve greater inference quality, in that conclusions may be drawn from both types of data, thereby making those conclusions more legitimate, or valid (from the quantitative paradigm) and trustworthy (from the qualitative paradigm) (Tashakkori & Teddlie, 2010). As such, future research regarding the interrelationship between identity, leisure, and health should include both quantitative and qualitative methods.

This research provides evidence that psychosocial identity does have an influence on the perception of leisure free-time, and that those in the distinctive identity statuses may be more able to experience leisure during their free-time due to cognitive characteristics (e.g., information seeking) and affective characteristics (e.g., enjoying challenge). Further, leisure free-time may be a context by which emerging adults succeed or stumble, which may cause or be caused by differences in well-being (e.g., self-esteem, depression). The entanglement of the phenomena of identity, leisure participation, and well-being can only be teased apart with further research. This research, while explorative in nature, provides evidence that future research is needed to further investigate the aforementioned phenomena.

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APPENDICES

APPENDIX A

Survey Instrument

CLEMSON
PARKS, RECREATION AND TOURISM MANAGEMENT

Understanding the Relationship between College Student Recreation Behavior, Identity Development, and Well-Being

Part 1: Your Experience during Free Time

Please indicate the extent to which you agree with each of the following statements about how you feel about your free time by checking the appropriate box. Please check only one.

	Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree
In general, I have a sufficient amount of free time during the week.	☐	☐	☐	☐	☐	☐	☐
For me, free time just drags on and on.	☐	☐	☐	☐	☐	☐	☐
In the community where I live I am aware of exciting things to do in my free time.	☐	☐	☐	☐	☐	☐	☐
I know of places where there are lots of things to do.	☐	☐	☐	☐	☐	☐	☐
Free time is boring.	☐	☐	☐	☐	☐	☐	☐
I like free time activities that are a little beyond my ability.	☐	☐	☐	☐	☐	☐	☐
If I think I might fail at an activity during my free time I won't do it.	☐	☐	☐	☐	☐	☐	☐
When I know I'm going to have some free time, I generally get anxious.	☐	☐	☐	☐	☐	☐	☐
In my free time I usually don't like what I'm doing but I don't know what else to do.	☐	☐	☐	☐	☐	☐	☐
I like challenge in my free time.	☐	☐	☐	☐	☐	☐	☐
The worst feeling I know is when I have free time and don't have anything planned.	☐	☐	☐	☐	☐	☐	☐
I usually become very absorbed by what I do in my free time.	☐	☐	☐	☐	☐	☐	☐
I've never really given much thought to whether free time could be good for me.	☐	☐	☐	☐	☐	☐	☐
During my free time I almost always have something to do.	☐	☐	☐	☐	☐	☐	☐
I am willing to try the unknown in my free time.	☐	☐	☐	☐	☐	☐	☐
I get uptight when I have the whole weekend with nothing to do.	☐	☐	☐	☐	☐	☐	☐
My friends and I often talk about how bored we are.	☐	☐	☐	☐	☐	☐	☐
My community lacks things for people my age to do.	☐	☐	☐	☐	☐	☐	☐
I feel good when my free time activities challenge my skills.	☐	☐	☐	☐	☐	☐	☐
I feel relaxed about free time when I don't have any plans.	☐	☐	☐	☐	☐	☐	☐

Part 2: Your Leisure Involvement

Leisure is any activity you find enjoyable. It can include crocheting, football, volunteering, reading, skydiving—the possibilities are endless!

Is there a leisure activity in which you regularly participate?		☐ Yes (Please continue with the questions below.)	☐ No (Please skip to Part 3 of this survey. It's on the next page.)
What is ONE activity in which you regularly participate (e.g., basketball, painting)? Please write it here. →			
I participate in this activity (Check only one):	☐ Mostly by myself	☐ Mostly with other people	☐ Both by myself and with others
I participate in this activity in (Check only one):	☐ Mostly in organized settings	☐ Mostly in unorganized settings	☐ Both in organized and unorganized settings

Using the leisure activity you identified above, please indicate the extent to which you agree with each of the following statements about *how you feel about your involvement in that activity* by checking the appropriate box.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
This activity is one of the most enjoyable things I do	☐	☐	☐	☐	☐
I find a lot of my life is organized around this activity	☐	☐	☐	☐	☐
I enjoy discussing this activity with my friends	☐	☐	☐	☐	☐
When I participate in this activity, I can really be myself	☐	☐	☐	☐	☐
You can tell a lot about a person by seeing them do this activity	☐	☐	☐	☐	☐
This activity is very important to me	☐	☐	☐	☐	☐
This activity occupies a central role in my life	☐	☐	☐	☐	☐
Most of my friends are in some way connected with this activity	☐	☐	☐	☐	☐
I identify with the people and image associated with this activity	☐	☐	☐	☐	☐
Participating in this activity says a lot about whom I am	☐	☐	☐	☐	☐
This activity is one of the most satisfying things I do	☐	☐	☐	☐	☐
To change my preference from this activity to another leisure activity would require major rethinking	☐	☐	☐	☐	☐
Participating in this activity provides me with an opportunity to be with friends	☐	☐	☐	☐	☐
When I'm doing this activity, I don't have to be concerned with the way I look	☐	☐	☐	☐	☐
When I participate in this activity, others see me the way I want them to see me	☐	☐	☐	☐	☐

Part 3: Your Feelings About Yourself

Now we will switch gears a bit. Please indicate the extent to which you agree with each of the following statements about *how you feel about yourself* in general by checking the appropriate box.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I have decided on the direction I am going to follow in my life.	☐	☐	☐	☐	☐
I have plans for what I am going to do in the future.	☐	☐	☐	☐	☐
I know which direction I am going to follow in my life.	☐	☐	☐	☐	☐
I have an image about what I am going to do in the future.	☐	☐	☐	☐	☐
I have made a choice on what I am going to do with my life.	☐	☐	☐	☐	☐
I think actively about different directions I might take in my life.	☐	☐	☐	☐	☐
I think about different things I might do in the future.	☐	☐	☐	☐	☐
I am considering a number of different lifestyles that might suit me.	☐	☐	☐	☐	☐
I think about different goals that I might pursue.	☐	☐	☐	☐	☐
I am thinking about different lifestyles that might be good for me.	☐	☐	☐	☐	☐
I am doubtful about what I really want to achieve in life.	☐	☐	☐	☐	☐
I worry about what I want to do with my future.	☐	☐	☐	☐	☐
I keep looking for the direction I want to take in my life.	☐	☐	☐	☐	☐
I keep wondering which direction my life has to take.	☐	☐	☐	☐	☐
It is hard for me to stop thinking about the direction I want to follow in my life.	☐	☐	☐	☐	☐
My plans for the future match with my true interests and values.	☐	☐	☐	☐	☐
My future plans give me self-confidence.	☐	☐	☐	☐	☐
Because of my future plans, I feel certain about myself.	☐	☐	☐	☐	☐
I sense that the direction I want to take in my life will really suit me.	☐	☐	☐	☐	☐
I am sure that my plans for the future are the right ones for me.	☐	☐	☐	☐	☐
I think about the future plans I already made.	☐	☐	☐	☐	☐
I talk with other people about my plans for the future.	☐	☐	☐	☐	☐
I think about whether the aims I already have for life really suit me.	☐	☐	☐	☐	☐
I try to find out what other people think about the specific direction I decided to take in my life.	☐	☐	☐	☐	☐
I think about whether my future plans match with what I really want.	☐	☐	☐	☐	☐

During the past week…	Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of the time (3-4 days)	Most or all of the time (5-7 days)
I was bothered by things that usually don't bother me.	☐	☐	☐	☐
I did not feel like eating; my appetite was poor.	☐	☐	☐	☐
I felt that I could not shake off the blues even with help from my family or friends.	☐	☐	☐	☐
I felt that I was just as good as other people.	☐	☐	☐	☐
I had trouble keeping my mind on what I was doing.	☐	☐	☐	☐
I felt depressed.	☐	☐	☐	☐
I felt that everything I did was an effort.	☐	☐	☐	☐
I felt hopeful about the future.	☐	☐	☐	☐
I thought my life had been a failure.	☐	☐	☐	☐
I felt fearful.	☐	☐	☐	☐
My sleep was restless.	☐	☐	☐	☐
I was happy.	☐	☐	☐	☐
I talked less than usual.	☐	☐	☐	☐
I felt lonely.	☐	☐	☐	☐
People were unfriendly.	☐	☐	☐	☐
I enjoyed life.	☐	☐	☐	☐
I had crying spells.	☐	☐	☐	☐
I felt sad.	☐	☐	☐	☐
I felt that people disliked me.	☐	☐	☐	☐
I could not get "going."	☐	☐	☐	☐

	Strongly disagree	Disagree	Agree	Strongly agree
I feel that I am a person of worth, at least on an equal plane with others.	☐	☐	☐	☐
I feel that I have a number of good qualities.	☐	☐	☐	☐
All in all, I am inclined to feel that I am a failure.	☐	☐	☐	☐
I am able to do things as well as most other people.	☐	☐	☐	☐

	Strongly disagree	Disagree	Agree	Strongly agree
I feel I do not have much to be proud of.	☐	☐	☐	☐
I take a positive attitude toward myself.	☐	☐	☐	☐
On the whole, I am satisfied with myself.	☐	☐	☐	☐
I wish I could have more respect for myself.	☐	☐	☐	☐
I certainly feel useless at times.	☐	☐	☐	☐
At times I think I am no good at all.	☐	☐	☐	☐

Part 4: Your Characteristics About Yourself

1. Your birthdate: Month: _____ Day: _____ Year: _____
2. Your gender (check one): ☐ Female ☐ Male
3. Class year (check one): ☐ Freshmen ☐ Sophomore ☐ Junior ☐ Senior
   ☐ Graduate Student ☐ Other _____
4. Your current major: _____ Your concentration (if applicable): _____
5. Your ethnic background (check one): ☐ Caucasian ☐ Latino/Hispanic ☐ African ☐ South Asian
   ☐ Middle Eastern ☐ East Asian ☐ Caribbean ☐ Mixed (please describe): _____
   ☐ Other (please describe): _____ ☐ I prefer not to answer
6. Your relationship status (check one): ☐ Single ☐ In a relationship ☐ Engaged ☐ Married
   ☐ Divorced/Separated ☐ Widowed ☐ Other ____
7. On average, how many hours do you work per week during the school year? (check one):
   ☐ I do not have a job during the school year. ☐ I work 20 hours or less per week.
   ☐ I work 21-39 hours per week. ☐ I work 40 hours or more per week.
8. We want to make sure we do not survey you twice but we do not want to collect any important identifying information about you (e.g., your CUID or SSN) so we will use your birthday and your initials to verify you didn't take this survey twice. Please write your initials here: _____

*****INVITATION TO PARTICIPATE IN PART TWO OF THIS STUDY*****

We would like to hear more about your past and current leisure experiences. If you would like to participate in a one-hour interview to share more about your leisure involvement and experiences, please write your name and email below. The interviews will be conducted on campus in a place of your choosing within the next six months. Your information will remain confidential. If you do not wish to participate, leave this portion blank.

Name: _____ Email Address: _____

Thank you for your participation in this research study!

APPENDIX B

IRB Approval Letter

August 25, 2014

CLEMSON
RESEARCH COMPLIANCE

Dr. Denise Anderson
Clemson University
Department of Parks, Recreation, and Tourism Management
269 Lehotsky Hall
Clemson, SC 29634

OFFICE OF
RESEARCH COMPLIANCE

Clemson University
321 Calhoun Drive
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Clemson, SC
29634-5704

P 864.656.1525
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SUBJECT: IRB Protocol # **IRB2014-198**, entitled "**Understanding the Relationship between College Student Recreation Behavior, Identity Development, and Well-Being**"

Dear Dr. Anderson:

The Institutional Review Board (IRB) of Clemson University reviewed the above-mentioned study using Expedited review procedures and has recommended approval. Approval for this study has been granted as of **August 21, 2014.** Please find enclosed with this letter your original, stamped consent document to be used with this protocol.

Your approval period is **August 21, 2014 to August 20, 2015.** Your continuing review is scheduled for July 2015. Please refer to the IRB number and title in communication regarding this study. Please note that the Principal Investigator is responsible for maintaining all signed consent forms (if applicable) for at least three (3) years after completion of the study.

No change in this approved research protocol can be initiated without the IRB's approval. This includes any proposed revisions or amendments to the protocol or consent form. Any unanticipated problems involving risk to subjects, any complications, and/or any adverse events must be reported to the Office of Research Compliance immediately. Please contact the office if your study has terminated or been completed before the identified review date.

The Clemson University IRB is committed to facilitating ethical research and protecting the rights of human subjects. Please contact the Office of Research Compliance at 656-6460 if you have any questions.

Sincerely,

Laura A. Moll, M.A., CIP
IRB Administrator

Enclosure